

TSD File Inventory Index

Date: November 13, 2001

Initial: CMKnewas

Facility Name: <u>Oak Technology, Inc. (One folder site)</u>			
Facility Identification Number: <u>110 091 278 790</u>			
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.1 Correspondence		.2 All Other Permitting Documents (Not Part of the ARA)	
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.4 Financial Insurance (Sudden, Non Sudden)	Y	.1 Land Disposal Restriction Notifications	Y
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.2 Reports		.3 RFI Program Reports and Oversight	
B.1 Administrative Record		.4 RFI Draft /Final Report	

Total -1

.5 RFI QAPP		.7 Lab data, Soil Sampling/Groundwater	
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.7 Lab Data, Soil-Sampling/Groundwater		D.5 Corrective Action/Enforcement	
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.6 CMI Correspondence		.9 Environmental Justice	

Note: Transmittal Letter to Be Included with Reports.

Comments: *Documents do not justify individual folders per schedule*

**A.2 Part A/
Interim Status**



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
RCRA ACTIVITIES
P.O. BOX A3587
CHICAGO, ILLINOIS 60690

Oak Switch Systems, Inc.
100 S. Main Street
Crystal Lake, IL 60014

6/5/89

Attn: Robert Bergheim

This is in response to your letter of 4-6-89 regarding
the following installation:

U.S. EPA ID NUMBER: ILD097278790

LOCATION OF INSTALLATION: 100 S. Main Street
Crystal Lake, IL 60014

According to the information submitted, you have indicated that this facility
is no longer in need of the U.S. EPA ID Number. Your ID number has been
coded as an inactive number. DO NOT USE this number without re-notifying the
U.S. EPA of your activity.

If you have any questions or need further assistance, please contact
Sharon Kiddon of my staff at (312)886-6173.

Sincerely,


Arthur S. Kawatachi
Information Section
RCRA Program Management Branch

Enclosure

cc: State Agency
File



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V

111 West Jackson Blvd.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
RCRA ACTIVITIES

APR 20 1982

Mr. J. Kornacker
Director, Operations Engineer
Oak Technology Inc., Switch Division
100 South Main Street
Crystal Lake, Illinois 60014

RE: Interim Status Acknowledgement USEPA ID No. ILD097278790
FACILITY NAME: Oak Technology Inc., Switch Division

Dear Mr. Kornacker:

This is to acknowledge that the U.S. Environmental Protection Agency (USEPA) has completed processing your Part A Hazardous Waste Permit Application. It is the opinion of this office that the information submitted is complete and that you, as an owner or operator of a hazardous waste management facility, have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. However, should USEPA obtain information which indicates that your application was incomplete or inaccurate, you may be requested to provide further documentation of your claim for Interim Status. Our opinion will be reevaluated on the basis of this information.

As an owner or operator of a hazardous waste management facility, you are required to comply with the interim status standards as prescribed in 40 CFR Parts 122 and 265, or with State rules and regulations in those States which have been authorized under Section 3006 of RCRA. In addition, you are reminded that operating under interim status does not relieve you from the need to comply with all applicable State and local requirements.

The printout enclosed with this letter identifies the limit(s) of the process design capacities your facility may use during the interim status period. This information was obtained from your Part A Permit application. If you wish to handle new wastes, to change processes, to increase the design capacity of existing processes, or to change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

As stated in the first paragraph of this letter, you have met the requirements of 40 CFR Part 122.23; your facility may operate under interim status until such time as a permit is issued or denied. This will be preceded by a request from this office or the State (if authorized) for Part B of your application. Please contact Arthur Kawatachi of my staff at (312) 886-7449, if you have any questions concerning this letter or the enclosure.

Sincerely yours,


Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Enclosure

cc: Gary T. Barbers, President
John P. Donohue, Jr., Vice President

1AC
4/16/82

FACILITY NAME

OAK TECHNOLOGY INC SWITCH DIV

EPA ID NUMBER

ILD097278790

FACILITY OPERATOR

OAK TECHNOLOGY INC SWITCH DIV.

FACILITY OWNER

OAK INDUSTRIES INC.

FACILITY LOCATION

100 S MAIN ST
CRYSTAL LAKE

IL 60014

PROCESS CODE

DESIGN CAPACITY

UNIT OF MEASURE

T01

15.00000

U

S01

4950.00000

G

*****KEY*****

PROCESS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE	* UNIT OF MEASURE	CODE
STORAGE:				
CONTAINER	S01	G OR L	* GALLONS	G
TANK	S02	G OR L	* LITERS	L
WASTE PILE	S03	Y OR C	* CUBIC YARDS	Y
SURFACE IMPOUNDMENT	S04	G OR L	* CUBIC METERS	C
DISPOSAL:			* GALLONS PER DAY	U
			* LITERS PER DAY	V
			* TONS PER HOUR	D
			* METRIC TONS\HOUR	W
INJECTION WELL	D79	G,L,U, OR V	* GALLONS\HOUR	E
LANDFILL	D80	A OR F	* LITERS\HOUR	H
LAND APPLICATION	D81	B OR Q	* ACRE-FEET	A
OCEAN DISPOSAL	D82	U OR V	* HECTARE-METER	F
SURFACE IMPOUNDMENT	D83	G OR L	* ACRES	B
TREATMENT:			* HECTARES	Q
			* POUNDS\HOUR	J
TANK	T01	U OR V	* KILOGRAMS\HOUR	R
SURFACE IMPOUNDMENT	T02	U OR V	* TONS PER DAY	N
INCINERATOR	T03	D,W,E, OR H	* METRIC TONS\DAY	S
OTHER	T04	J,R,N,S,U,V	*	

Part A File



**ACKNOWLEDGEMENT OF NOTIFICATION
OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)**

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER

• ILD097278790 REACKNOWLEDGEMENT

INSTALLATION ADDRESS

OAK TECHNOLOGY INC SWITCH DIV
100 S MAIN ST
CRYSTAL LAKE IL 60014

100 S MAIN ST
CRYSTAL LAKE IL 60014

U.S. ENVIRONMENTAL PROTECTION AGENCY
NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.	1L0000123127
NAME OF INSTALLATION	OAK TECHNOLOGY INC
INSTALLATION MAILING ADDRESS	OAK INDUSTRIES INC SWITCH DIV 50 MAIN ST CRYSTAL LAKE, IL 60014 ATTN: JOHN J. KORNACKER
LOCATION OF INSTALLATION	000075 AUG -7 80 50 MAIN ST CRYSTAL LAKE, IL 60014

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law (Section 3010 of the Resource Conservation and Recovery Act).

FOR OFFICIAL USE ONLY

COMMENTS

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
F 1 L D 0 9 7 2 7 8 7 9 0	A	8 0 0 8 0 7

I. NAME OF INSTALLATION

OAK TECHNOLOGY INC SWITCH DIV

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX

100 S MAIN STREET

CITY OR TOWN

ST.

ZIP CODE

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER

100 S MAIN STREET

CITY OR TOWN

ST.

ZIP CODE

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title)

PHONE NO. (area code & no.)

KORNACKER J DIR OPERATIONS ENG 815-459-5000

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER

OAK TECHNOLOGY INC SWITCH DIVISION

B. TYPE OF OWNERSHIP (enter the appropriate letter into box)

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

F = FEDERAL
M = NON-FEDERAL☒ A. GENERATION☐ B. TRANSPORTATION (complete item VII)☒ C. TREAT/STORE/DISPOSE☐ D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION (transporters only - enter "X" in the appropriate box(es))

☐ A. AIR☐ B. RAIL☐ C. HIGHWAY☐ D. WATER☐ E. OTHER (specify):

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

☒ A. FIRST NOTIFICATION☐ B. SUBSEQUENT NOTIFICATION (complete item C)

C. INSTALLATION'S EPA I.D. NO.

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1 F001	2 F002	3 F006	4 F007	5 F008	6 F009
7 F010	8 F011	9 F012	10	11	12

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31 P029	32 P030	33 P098	34 P099	35 P104	36 P106
37 U002	38 U226	39 U228	40	41	42
43	44	45	46	47	48

D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54
----	----	----	----	----	----

E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. (See 40 CFR Parts 261.21 - 261.24.)

☒ 1. IGNITABLE
(D001)

☒ 2. CORROSIVE
(D002)

☒ 3. REACTIVE
(D003)

☒ 4. TOXIC
(D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE

NAME & OFFICIAL TITLE (type or print)

DATE SIGNED

John J. Komach

DIRECTOR OF OPERATIONS ENG.

8-4-80



217/782-6762

Refer to: 1110150005 -- McHenry County
Crystal Lake/Oak Switch Systems
ILD097278790
RCRA General

August 19, 1986

Y. J. Kim
Acting Chief, Technical Program Section
U.S. Environmental Protection Agency
Region V
230 South Dearborn
Chicago, Illinois 60604

Dear Mr. Kim:

Enclosed you will find the following:

1. The Initial Screening for Environmental Significance form for the above referenced facility.
2. A copy of the Certification Regarding Potential Releases from Solid Waste Management Units for the above referenced facility and/or the reply the Agency received in response to our request for information regarding the above.

The following form(s) were not on file at the IEPA for this facility:

1. Notification of Hazardous Waste Site (EPA Form 8900-1).
2. Preliminary Assessment (EPA Form 2070-12).

Based upon a review of the information available on the above referenced facility, the Agency has determined that this facility is not environmentally significant and that a Facility Management Plan should not be prepared. Please let us know if you do not agree with this determination.

RECEIVED

AUG 25 1986

SWD - AIS
U.S. EPA, REGION V

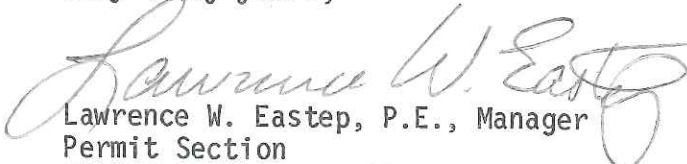
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AUG 27 1986
SOLID WASTE BRANCH
U.S. EPA, REGION V



Page 2

If you have any questions regarding this initial screening, please contact Eugene W. Dingledine of my staff at 217/785-2892.

Very truly yours,


Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:EWD:rd1761F/9-10

Enclosure

cc: Division File
USEPA Region V -- Ann Budich
FOS Northern Region

CERTIFICATION REGARDING POTENTIAL RELEASES FROM
SOLID WASTE MANAGEMENT UNITS
(CLOSURE PLAN REVIEW)

FACILITY NAME: OAK SWITCH SYSTEMS INC.

EPA I.D. NUMBER: 097278796 1110150005

LOCATION CITY: CRYSTAL LAKE

STATE: ILLINOIS 60014

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTES UNITS CURRENTLY SHOWN IN YOUR PART A APPLICATION and in your closure plan.

	YES	NO
• Landfill	<u> </u>	<u>X</u>
• Surface Impoundment	<u> </u>	<u>X</u>
• Land Farm	<u> </u>	<u>X</u>
• Waste Pile	<u> </u>	<u>X</u>
• Incinerator	<u> </u>	<u>X</u>
• Storage Tank (Above Ground)	<u> </u>	<u>X</u>
• Storage Tank (Underground)	<u> </u>	<u>X</u>
• Container Storage Area	<u> </u>	<u>X</u>
• Injection Wells	<u> </u>	<u>X</u>
• Wastewater Treatment Units	<u> </u>	<u>X</u>
• Transfer Stations	<u> </u>	<u>X</u>
• Waste Recycling Operations	<u> </u>	<u>X</u>
• Waste Treatment, Detoxification	<u> </u>	<u>X</u>
• Other <u> </u>	<u> </u>	<u>X</u>

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed on and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, provide a site plan if available.

RECEIVED

APR 30 1986

FEDERAL

NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

3. For the units noted in Number 1 above and also those hazardous waste units in your Part A application and in your closure plan. please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or still be occurring.

Please provide the following information

- a. Date of release
- b. Type of waste released .
- c. Quantity or volume of waste released
- d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

A) SPECIFIC DATES UNKNOWN OCCURRED OVER AN EXTENDED TIME IN THE PAST

B) WASTE CUTTING OIL & LUBRICATING OIL.

C) UNKNOWN, ESTIMATE LESS THAN 50 GALS.

D) ASSUME THAT SMALL AMOUNTS OF OIL RELEASED DURING HANDLING & TRANSFER FROM DRUMS SOME TIME AGO.

THE CLOSURE PLAN INCLUDES EXCAVATION & REMOVAL OF APPROXIMATELY 70 CU. YDS OF GRAVEL FROM THE CONTAMINATED AREA SURROUNDING THE WASTE OIL DRUM STORAGE PAD. THE GRAVEL WILL BE HAULED AND TREATED IN ACCORDANCE WITH THE CLOSURE PLAN.

4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases, Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

SEE ATTACHED COPY OF ANALYSIS BY, SCIENTIFIC

CONTROL LABS. INC.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))

JOHN J. KORNACKER, MFG. ENG.

Typed Name and Title

John J. Kornacker
Signature

4-28-86

Date

RECEIVED

APR 30 1986

RECEIVED



3158 S. KOLIN AVENUE
CHICAGO, ILL 60623-4889
(312) 254-2406

Scientific

CONTROL LABORATORIES, INC.

TESTING • RESEARCH • CONSULTING

REPORT TO: Oak Switch Systems, Inc.
P. O. Box 517
Crystal Lake, IL 60014

ATTENTION: Mr. John Kornacker

ORDER NO..

REPORT NO.: 9-381-AMENDED

SPECIFICATION NO..

RECEIVED: 11-21-85

TYPE TEST.

Waste Analysis

REPORTED: 4-14-86

IDENTIFICATION OF MATERIAL

One (1) Soil sample - taken by our laboratory personnel.

PURPOSE:

The purpose of this testing is to determine if the submitted sample is hazardous as per 40 CFR, Part 261, Appendix II.

I. TOXICITY:

PROCEDURE:

The sample was leached and analyzed in accordance with the procedure specified in 40 CFR, Part 261, Appendix II.

<u>RESULTS:</u>	<u>EPA Hazardous Waste Number</u>	<u>Maximum Allowable Concentration (mg/l)</u>	<u>Analysis: (mg/l)</u>
Arsenic	D004	5.0	*0.1
Barium	D005	100.	*0.1
Cadmium	D006	1.0	*0.1
Chromium	D007	5.0	*0.1
Hexavalent Chromium	D007	5.0	*0.1
Lead	D008	5.0	*0.1
Mercury	D009	0.2	*0.1
Selenium	D010	1.0	*0.1
Silver	D011	5.0	*0.1
Nickel	----	20.0	*0.1

*Denotes "less than" (below detectable limit of procedure used).

APR 30 1986

Oak Switch Systems, Inc.
Page two

Lab. No. 9-381-AMENDED
April 14, 1986

II. IGNITABILITY - (D001):

PROCEDURE:

The Flash Point was determined in accordance with ASTM D-93-79.

RESULTS:

Flash Point (Closed Cup) <u>Greater than 200 °F</u>	Minimum Allowable <u>140 °F</u>
---	---------------------------------

III. CORROSIVITY - (D002):

PROCEDURE:

If the pH of the sample is less than or equal to 2.0 or greater or equal to 12.5, the corrosivity (ie; Total Acidity/Total Alkalinity) is determined in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods SW846 USEPA."

RESULTS:

pH (10% by wt)	<u>6.75</u>
Total Acid/Total Alkaline (if necessary) (mg/l CaCO ₃)	<u>Not applicable.</u>

IV. REACTIVITY - (D003):

PROCEDURE:

The sample was analyzed in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods SW846 USEPA."

RESULTS:

<u>Parameter</u>	<u>Concentration in ppm</u>
Total Cyanide	*1.0
Sulfide	485.
Phenol	1.1
Reactive Sulfide	27.0

This sample would be considered hazardous based on D002 reactivity.
D003

Respectfully submitted,

SCIENTIFIC CONTROL LABORATORIES, INC.

FA:vg
2 c

By


Frank Altmayer

RECEIVED

APR 30 1986



FORM 1		U.S. ENVIRONMENTAL PROTECTION AGENCY	
GENERAL		GENERAL INFORMATION	
		Consolidated Permits Program (Read the "General Instructions" before starting.)	
LABEL ITEMS		ILD097278790	
EPA I.D. NUMBER		IL1005123127 127-97278790	
III. FACILITY NAME		TECHNOLOGY	
V. FACILITY MAILING ADDRESS		OAK INDUSTRIES INC SWITCH DIVISION	
		50 MAIN ST	
		CRYSTAL LAKE, IL 60014	
VI. FACILITY LOCATION		50 MAIN ST	
		CRYSTAL LAKE, IL 60014	

I. EPA I.D. NUMBER														
F 1L0005123127 127-97278790														
GENERAL INSTRUCTIONS														
If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.														

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X'			SPECIFIC QUESTIONS	MARK 'X'		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X			F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

C	1	SKIP	OAK TECHNOLOGY INC SWITCH DIVISION
---	---	------	------------------------------------

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)				B. PHONE (area code & no.)			
C	2	KORNACKER J. DIR. OPERATIONS ENG	815	459	5000		

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX				B. CITY OR TOWN				C. STATE		D. ZIP CODE	
C	3	100 S MAIN ST		4	CRYSTAL LAKE	IL	60014				

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER											
C	5	100 S MAIN ST									
B. COUNTY NAME											
C	6	MCHENRY									
C. CITY OR TOWN											
C	6	CRYSTAL LAKE		D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)					
				IL	60014						

VII. SIC CODES (4-digit, in order of priority)

A. FIRST				B. SECOND			
C	7	3662	(specify)	C	7		(specify)
15	16	17	18	15	16	17	18
RADIO & T.V. COMMUNICATION EQUIP.				NA			
C. THIRD				D. FOURTH			
C	7	3679	(specify)	C	7		(specify)
15	16	17	18	15	16	17	18
ELECTRONIC COMPONENTS N.E.C.				NA			

VIII. OPERATOR INFORMATION

A. NAME												B. Is the name listed in Item VIII-A also the owner?							
C	CAK TECHNOLOGY INC SWITCH DIVISION												<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO						
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)												D. PHONE (area code & no.)							
F = FEDERAL M = PUBLIC (other than federal or state) S = STATE O = OTHER (specify) P = PRIVATE												CORPORATION				815 459 5000			
E. STREET OR P.O. BOX																			
100 S MAIN STREET																			
F. CITY OR TOWN												G. STATE		H. ZIP CODE		IX. INDIAN LAND			
CRYSTAL LAKE												IL		60014		Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)												D. PSD (Air Emissions from Proposed Sources)											
C	T	I	NA									C	T	I	11105ACM								
9	N		15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
B. UIC (Underground Injection of Fluids)												E. OTHER (specify)											
C	T	I	NA									C	T	I	1110ACL								
9	U		15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
C. RCRA (Hazardous Wastes)												E. OTHER (specify)											
C	T	I	NA									C	T	I	NA								
9	R		15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

MANUFACTURER OF ROTARY, PUSHBUTTON SWITCHES AND SPECIAL PRODUCTS FOR RADIO, T.V. AND COMMUNICATION INDUSTRY

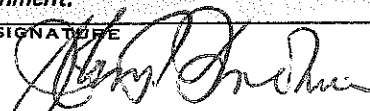
XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)

V.R. Quatman

B. SIGNATURE



C. DATE SIGNED

Nov. 17, 1980

COMMENTS FOR OFFICIAL USE ONLY

C															
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

FORM 3 RCRA		EPA		U.S. ENVIRONMENTAL PROTECTION AGENCY HAZARDOUS WASTE PERMIT APPLICATION <i>Consolidated Permits Program</i> (This information is required under Section 3005 of RCRA.)		I. EPA I.D. NUMBER <div style="border: 1px solid black; padding: 2px;">S F +40005189121 T/A/C 1 13 14 15</div>																																																																	
FOR OFFICIAL USE ONLY				COMMENTS																																																																			
APPLICATION APPROVED		DATE RECEIVED (yr., mo., & day)		1LD097278790																																																																			
23		24		29																																																																			
II. FIRST OR REVISED APPLICATION																																																																							
<p>Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.</p>																																																																							
A. FIRST APPLICATION (place an "X" below and provide the appropriate date)																																																																							
<input checked="" type="checkbox"/> 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)						<input type="checkbox"/> 2. NEW FACILITY (Complete item below.)																																																																	
<div style="display: flex; justify-content: space-between;"><div><table border="1" style="font-size: 8px;"><tr><td>YR.</td><td>MO.</td><td>DAY</td></tr><tr><td>72</td><td>06</td><td>12</td></tr></table><p>FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)</p></div><div><table border="1" style="font-size: 8px;"><tr><td>YR.</td><td>MO.</td><td>DAY</td></tr><tr><td></td><td></td><td></td></tr></table><p>FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN</p></div></div>						YR.	MO.	DAY	72	06	12	YR.	MO.	DAY																																																									
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B. REVISED APPLICATION (place an "X" below and complete Item I above)																																																																							
<input type="checkbox"/> 1. FACILITY HAS INTERIM STATUS						<input type="checkbox"/> 2. FACILITY HAS A RCRA PERMIT																																																																	
III. PROCESSES - CODES AND DESIGN CAPACITIES																																																																							
<p>A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).</p>																																																																							
<p>B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.</p>																																																																							
<div style="display: flex; justify-content: space-between;"><div style="width: 48%;"><p>1. AMOUNT - Enter the amount.</p><p>2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.</p><table border="1" style="width: 100%; font-size: 8px;"><thead><tr><th>PROCESS</th><th>PRO- CESS CODE</th><th>APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY</th></tr></thead><tbody><tr><td>Storage:</td><td></td><td></td></tr><tr><td>CONTAINER (barrel, drum, etc.)</td><td>S01</td><td>GALLONS OR LITERS</td></tr><tr><td>TANK</td><td>S02</td><td>GALLONS OR LITERS</td></tr><tr><td>WASTE PILE</td><td>S03</td><td>CUBIC YARDS OR CUBIC METERS</td></tr><tr><td>SURFACE IMPOUNDMENT</td><td>S04</td><td>GALLONS OR LITERS</td></tr><tr><td>Disposal:</td><td></td><td></td></tr><tr><td>INJECTION WELL</td><td>D79</td><td>GALLONS OR LITERS</td></tr><tr><td>LANDFILL</td><td>D80</td><td>ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER</td></tr><tr><td>LAND APPLICATION</td><td>D81</td><td>ACRES OR HECTARES</td></tr><tr><td>OCEAN DISPOSAL</td><td>D82</td><td>GALLONS PER DAY OR LITERS PER DAY</td></tr><tr><td>SURFACE IMPOUNDMENT</td><td>D83</td><td>GALLONS OR LITERS</td></tr></tbody></table><div style="display: flex; justify-content: space-between;"><div><p>UNIT OF MEASURE</p><p>GALLONS.....G</p><p>LITERS.....L</p><p>CUBIC YARDS.....Y</p><p>CUBIC METERS.....C</p><p>GALLONS PER DAY.....U</p></div><div><p>UNIT OF MEASURE</p><p>LITERS PER DAY.....V</p><p>TONS PER HOUR.....D</p><p>METRIC TONS PER HOUR.....W</p><p>GALLONS PER HOUR.....E</p><p>LITERS PER HOUR.....H</p></div></div></div><div style="width: 48%;"><p>Treatment:</p><p>TANK</p><p>SURFACE IMPOUNDMENT</p><p>INCINERATOR</p><p>OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)</p><table border="1" style="width: 100%; font-size: 8px;"><thead><tr><th>PRO- CESS CODE</th><th>APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY</th></tr></thead><tbody><tr><td>T01</td><td>GALLONS PER DAY OR LITERS PER DAY</td></tr><tr><td>T02</td><td>GALLONS PER DAY OR LITERS PER DAY</td></tr><tr><td>T03</td><td>TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR</td></tr><tr><td>T04</td><td>GALLONS PER DAY OR LITERS PER DAY</td></tr></tbody></table><div style="display: flex; justify-content: space-between;"><div><p>UNIT OF MEASURE</p><p>ACRE-FEET.....A</p><p>HECTARE-METER.....F</p><p>ACRES.....B</p><p>HECTARES.....Q</p></div></div></div></div>								PROCESS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	Storage:			CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS	TANK	S02	GALLONS OR LITERS	WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS	Disposal:			INJECTION WELL	D79	GALLONS OR LITERS	LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER	LAND APPLICATION	D81	ACRES OR HECTARES	OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY	SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	T01	GALLONS PER DAY OR LITERS PER DAY	T02	GALLONS PER DAY OR LITERS PER DAY	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR	T04	GALLONS PER DAY OR LITERS PER DAY																		
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<p>EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.</p>																																																																							
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LINE NUMBER	A. PRO- CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY	FOR OFFICIAL USE ONLY																																																																				
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9		NA																																																																					
10		NA																																																																					

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

NA

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE **CODE**
 POUNDS.....P
 TONS.....T

METRIC UNIT OF MEASURE **CODE**
 KILOGRAMS.....K
 METRIC TONS.....M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES**1. PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEA- SURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

531

EPA I.D. NUMBER (enter from page 1)										FOR OFFICIAL USE ONLY										
S										S										
W										W										
1										1										
158897278796										DUP										
14 15										13 14 15 23 - 26										
V. DESCRIPTION OF HAZARDOUS WASTES (continued)																				
LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)			B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES														
	23	24	25			1. PROCESS CODES (enter)														
	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
1	F	0	0	1	2200	G	5	0	1	T	0	1								
2	F	0	0	2																INCLUDED IN ITEM 1
3	F	0	0	6	65,000	P	5	0	1											
4	F	0	0	7																INCLUDED IN ITEM 3
5	F	0	0	8																INCLUDED IN ITEM 3
6	F	0	0	9	350	G	5	0	1											
7	F	0	1	0	50	G	T	0	1											
8	P	0	1	1																INCLUDED IN ITEM 7
9	F	0	1	2																INCLUDED IN ITEM 3
10	P	0	2	9																INCLUDED IN ITEM 3
11	P	0	3	0																INCLUDED IN ITEM 3
12	P	0	9	8																INCLUDED IN ITEM 3
13	P	0	9	9																INCLUDED IN ITEM 3
14	P	1	0	4																INCLUDED IN ITEM 3
15	P	1	0	6																INCLUDED IN ITEM 3
16	U	0	0	2	30	G	5	0	1											
17	U	2	2	6	2300	G	5	0	1											
18	U	2	2	8																INCLUDED IN ITEM 17
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				

IV. DESCRIPTION OF HAZARDOUS WASTE (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

ILD 097278790

EPA I.D. NO. (enter from page 1)																
S	F	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)										LONGITUDE (degrees, minutes, & seconds)									
4	2	1	2	0	0					8	8	1	9	0	0				
65	66	67	68	69	70	71				72	73	74	75	76	77	78			

VIII. FACILITY OWNER

- ☐ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER															2. PHONE NO. (area code & no.)																							
C	E	OAK INDUSTRIES INC.															714-485-9300																					
13	14																55	56	57	58	59	60	61	62	63	64	65											
3. STREET OR P.O. BOX															4. CITY OR TOWN										5. ST.					6. ZIP CODE								
C	F	16935 W. BERNARDO DRIVE															C	G	SAN DIEGO										CA					92128				
13	14																45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

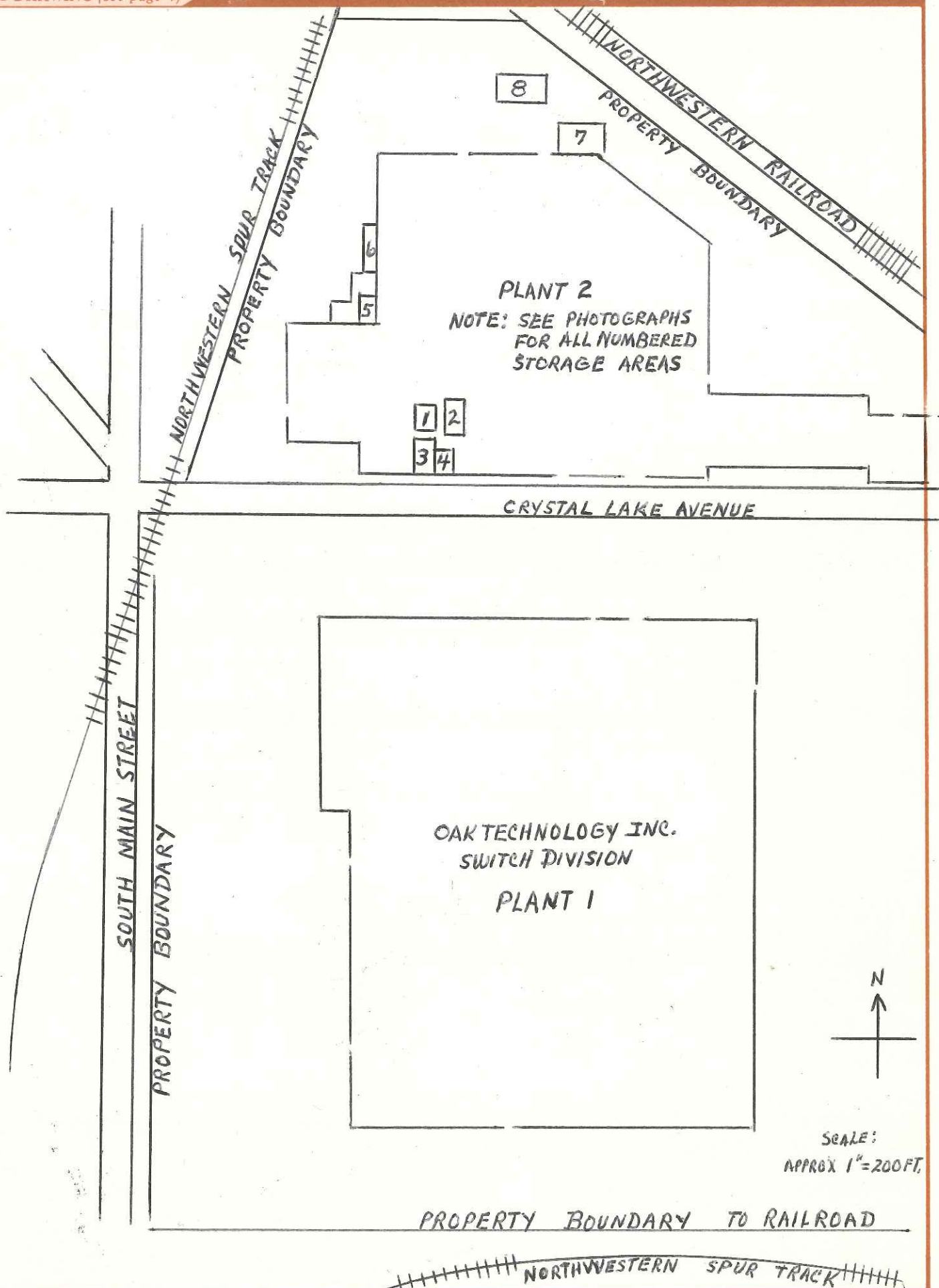
A. NAME (print or type)		B. SIGNATURE		C. DATE SIGNED	
President Oak Technology, Inc.		Gary T. Barbera		11-18-80	

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)		B. SIGNATURE		C. DATE SIGNED	
V.P. Operations		[Signature]		Nov. 17, 1980	

V. FACILITY DRAWING (see page 4)

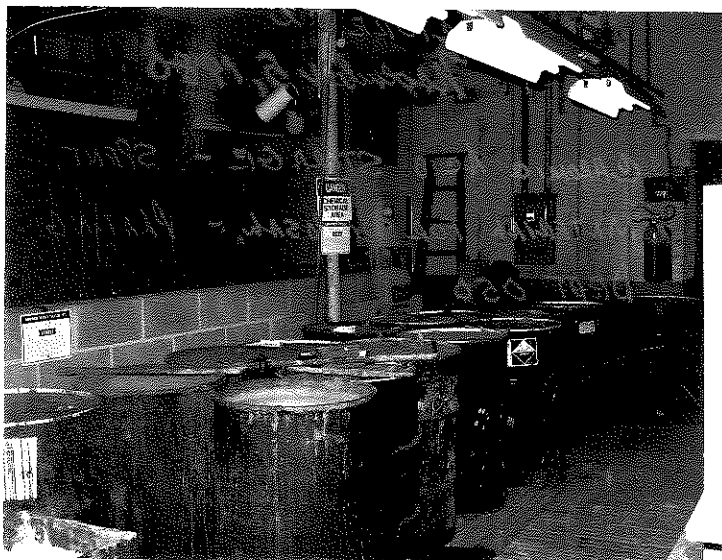


V. FACILITY DRAWING (see page 4)



Picture #1

Sulfuric acid storage for
waste water treatment - Plating
Dept. 050



Picture #2

Chromic Acid storage - Spent
material for disposal -
Plating Dept. 050



Picture #3

Chromic acid storage - Spent
material for disposal
Plating Dept. 050

V. FACILITY DRAWING (see page 4)

531



Picture #4

Sodium hypochlorite
Storage area



Picture #5

(2) Items stored this location

Item 1- Ammonium nitrate storage
Spent material for disposal p
Plating Dept. 050.

Item 2- Waste water sludge
storage.



Picture #6

Spent hydraulic oil storage
from plastic molding machines

V. FACILITY DRAWING (see page 4)

531

Picture #7

Spent cutting oil from screw machines and spent trichloroethylene for reclamation.



Picture #8

Spent freon TF
(Trichlorotrifluoroethane)
storage



Art K



Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 1110150005 -- McHenry County
Crystal Lake/Oak Switch Systems
Closure Plan Approved: August 18, 1986 Log #C-232
ILD097278790
RCRA-Closure

April 6, 1989

Oak Switch Systems, Inc.
ATTN: Robert Bergslien
100 South Main Street
Crystal Lake, Illinois 60014

Dear Mr. Bergslien:

The subject hazardous waste management facility was inspected by a representative of this Agency on December 12, 1987. The inspection revealed that the closure activity was completed in accordance with the approved closure plan dated August 18, 1986.

Certification that the three (3) storage (S01) areas have been closed in accordance with the approved closure plan by the owner/operator, Oak Switch Systems, and an independent registered professional engineer, Ronald A. Bahr, P.E., of Illinois was received by this Agency March 13, 1987.

The Agency has determined that the closure of the storage (S01) area has apparently met the requirements of Interim Status Standards, 35 Ill. Admin. Code, Part 725 (40 CFR, Part 265). Please note, the Agency has withdrawn your Part A application to reflect status change due to completed closure activities.

This facility must continue to meet the requirements of 35 Ill. Admin. Code, Part 722 (40 CFR Part 262) - Standards Applicable to Generators of Hazardous Waste and 35 Ill. Admin. Code, Part 723 (40 CFR Part 263) - Standards Applicable to Transporters of Hazardous Waste and is no longer subject to 35 Ill. Admin. Code, Part 725, Subpart H (40 CFR Part 265, Subpart H) - Financial Requirements.

In accordance with the requirements of 35 IAC 725.243(h), further maintenance of certain financial assurance mechanisms is no longer needed. Therefore, this agency herewith returns the following financial documents:

1. Trust Fund Agreement and by way of this letter, authorization is given to the trustees to release the monies in the trust fund.



Page 2

If you have any questions, please contact Eugene W. Dingledine at 217/782-5504.

Very truly yours,

Lawrence W. Eastep

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:EWD:jas/1271k,85-86

cc: Northern Region
USEPA Region V, Mary Murphy
USEPA Region V, Art Kawatachi
Ronald A. Bahr, P.E.
Division File
Andy Vollmer
Compliance Section
James J. Zambon, Trustee



Jim Mayka

217/782-6762

Log No. 232
Received: April 21, 1986

Refer to: 1110150005 -- McHenry County
Crystal Lake/Oak Switch Systems
ILD097278790

August 18, 1986

Oak Switch Systems, Inc.
Attention: Mr. John Kornacker
100 South Main Street
Crystal Lake, Illinois 60014

RECEIVED
AUG 24 1986
SOLID WASTE DIVISION
U.S. EPA REGION V

Dear Mr. Kornacker:

The revised closure plan submitted and prepared by Scientific Control Laboratories, Inc. has been reviewed by this Agency. Your final closure plan to close the hazardous waste container (S01) storage is hereby approved subject to the following conditions.

1. When closure is complete the owner or operator must submit to the Director certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. This certification must be received at this Agency within 30 days after closure, or by March 13, 1987.

The attached closure certification form must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126.

Also along with closure certification, to document the closure activities at your facility, please submit a Closure Documentation Report which includes:

- a. The volume of waste and waste residue removed.
- b. A description of the method of waste handling and transport.
- c. The waste manifests numbers.
- d. A description of the sampling and analysis methods used.
- e. A chronological summary of closure activities and the cost involved.
- f. Photo documentation of closure.
- g. Test performed, methods and results.



Page 2

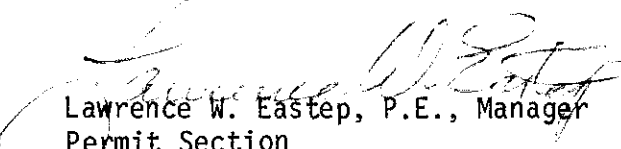
All certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
Springfield, Illinois 62706

2. This facility must continue to meet the applicable requirements of 35 IAC Part 722 - Standards Applicable to Generators of Hazardous Waste and Part 723 - Standards Applicable to Transporters of Hazardous Waste.
3. The "Certification Regarding Potential Releases from Solid Waste Management Units" which you submitted is being forwarded to the USEPA for possible future action. The approval of this closure plan neither approves nor disapproves of the aforementioned "Certification".
4. Along with your certification of closure, please submit a letter requesting withdrawal of your facility's Part A application.

Should you have any questions regarding this matter, please contact Eugene W. Dingledine at 217/785-2892.

Very truly yours,


Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:EWD:rd1761F/6-7

Attachment

cc: Northern Region
Division File - Closure
Financial Assurance Unit
Ronald A. Bahr, P.E.
USEPA Region V -- Jim Mayka
Compliance Monitoring Section



ATTACHMENT

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. At least one copy of the certification must contain the original signatures.

Closure Certification Statement

The hazardous waste management unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Registration Number

Date

EWD:rd1761F/8

**C.2 Compliance
And Enforcement**



P486652557

217/782-6761

Refer to: # 1110150005 -- McHenry County
Oak Switch Systems
ILD 097278790
RCRA - Permits

May 6, 1988

Oak Switch Systems
100 S. Main Street
Crystal Lake, Illinois 60014

Attn: Environmental Coordinator or
Plant Manager

Dear Sir:

According to Agency files, your facility currently manages hazardous waste in containers and/or tanks subject to the requirements of 35 IAC 700-725. 35 IAC 703.157(f) states that interim status for any hazardous waste storage or treatment facility will be terminated November 8, 1992, unless the facility submits Part B of the RCRA permit application for these units to this Agency by November 8, 1988. This letter is written to (1) make you aware of this requirement and (2) describe the actions which must be taken in response to this requirement.

According to 35 IAC 703.157(f), if an existing facility desires to (1) store hazardous waste on-site for greater than ninety (90) days, (2) treat hazardous waste, or (3) store hazardous waste as a commercial facility after November 8, 1992, it must submit Part B of the RCRA permit application to this Agency by November 8, 1988. The information which must be contained in this application is described in 35 IAC 703, Subpart D. The enclosed document, entitled "RCRA Permit Guidance" provides more detail regarding the necessary contents of the application and also identifies several guidance documents which will be useful in developing the application. Also included in this document is the form which must be used when submitting the application.

If a facility does not desire to continue storing and/or treating hazardous waste after November 8, 1992, it must close the storage and/or treatment unit(s) present at the facility prior to this date. Closure, in this instance, basically means that all contamination must be removed from the unit(s) and if necessary, from the area surrounding these units. The requirements which must be met in closing these units are contained in 35 IAC 725, Subpart G. For your convenience, guidance for the development of a closure plan is contained in the enclosed document entitled "Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities." PLEASE NOTE THAT A CLOSURE PLAN DOES NOT NEED TO BE SUBMITTED AT THIS TIME. IT MUST HOWEVER, BE SUBMITTED TO THE AGENCY NO LATER THAN MAY 8, 1992.



Page 2

In some instances, there may be several interim status hazardous waste management units at a facility. The facility may desire to pursue a final RCRA permit for a portion of these units and close the rest of them. Because of the uncertainty associated with this option, all interim status units at a facility must be included in Part B of the RCRA permit application, unless a closure plan for the units being closed is submitted with the Part B. If a closure plan is submitted with the Part B, the application need only address those units which will remain in operation.

The only alternatives available for hazardous waste treatment and storage facilities to meet the requirements of 35 IAC 703.157(f) are (1) submit Part B of the RCRA permit application by November 8, 1988 or (2) close by November 8, 1992. However, some facilities may have previously filed Part A of the RCRA permit application in error and now feel that the hazardous waste management activities carried out at the facility do not require a RCRA permit (i.e. the Part A was filed for protective measures). If this is the case, the Agency requests that information supporting this position be submitted no later than November 8, 1988. The Agency can then review the information submitted and correct its records accordingly. The information which must be submitted to make this demonstration is contained in the enclosed document entitled "Facility Part A Withdrawal Request Form."

Finally, some facilities may have closed or are currently closing in accordance with an IEPA approved closure plan. (Please bear in mind this letter is going out to over 200 facilities; some closed facilities may inadvertently receive this letter.) In this instance, the Agency requests that a copy of (1) the closure plan approval letter and (2) the letter from the Agency accepting the certifications of the owner/operator and the registered professional engineer that closure was carried out in accordance with the approved closure plan (if closure has been completed) be submitted by November 8, 1988. The Agency will again be able to review this information and correct its records accordingly.

Because of the large number of facilities subject to the requirements of 35 IAC 703.157(f), the Agency requests that all facilities receiving this letter complete the enclosed form entitled "RCRA Permit Information Form." The form has been developed such that it can be used by a facility falling into any of the five categories described above (pursuing a final permit, planning to close, pursuing a permit for only a portion of the interim status units and closing the other units, protective filers, closed in accordance with an IEPA approved closure plan). This form must be submitted to the Agency no later than November 8, 1988, along with all required attachments. Failure to do so may subject a facility to enforcement under State and/or Federal regulations and possible monetary penalties up to \$25,000 per day of noncompliance.



Page 3

The RCRA Permit Information Form and all required attachments must be submitted in triplicate (original and two (2) copies) to the following address:

Permit Section, RCRA Unit
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276

If you have any questions regarding this letter, please contact Jim Moore at 217/782-9675.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LNE:JKM:dks/1238j/1244j/1-3

Enclosures

cc: Division File
Compliance
Maywood Region
USPEA Region V

APR 11 1988

5HS-12

Mr. Don Pogensee
Oak Technology, Inc./Switch Division
100 South Main Street
Crystal Lake, Illinois 60014

Re: Oak Technology, Inc.
Switch Division
ILD 097 278 790

Dear Mr. Pogensee:

The United States Environmental Protection Agency has reviewed the information which you submitted to this office on March 28, 1988. The stated actions appear to adequately address the land disposal restrictions deficiency outlined in our March 7, 1988, Notice of Violation.

Your cooperation and efforts in this matter are further questions, please feel free to contact (312) 886-4581.

Sincerely yours,

Paul Dimock, Chief
IL/MI/WI Enforcement Programs Section

cc: Glenn Savage, IEPA, FOS
Harry Chappel, IEPA, CMS

5HS-12:ZTHOMAS:4/6/88:ev DISK #3

PS Form 3811, Mar. 1987

★ U.S.G.P.O. 1987-178-268

DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested. 1. <input checked="" type="checkbox"/> Show to whom delivered, date, and addressee's address. <input type="checkbox"/> Restricted Delivery ↑(Extra charge)↑ ↑(Extra charge)↑	
3. Article Addressed to: Mr. Don Pogensee Oak Technology, Inc./Switch Div. 100 South Main Street Crystal Lake, Illinois 60014	4. Article Number P 759 199 405 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee X	8. Addressee's Address <i>(ONLY if requested and fee paid)</i>
6. Signature — Agent X <i>Lessie Howe</i>	
7. Date of Delivery <i>4-6-88</i>	

*offered
4/14/88*

*1
4/14/88*



Switch Systems Inc.

An Oak Industries Inc. Company

March 28, 1988

United States Environmental
Protection Agency - Region 5
230 S. Dearborn St.
Chicago, Illinois 60604
To the attention of: SHS-12

Ref: Notice of Violation
Oak Switch Systems
ILD 097 278 790

Dear Mr. Munoz:

With reference to your letter dated 07 March 1988 regarding the violation of F-solvent waste shipments:

Attached are copies of our, "Notice of Land Disposal Restriction of Waste". This form was provided to us from Safety Kleen and is currently being used for all F-Solvent wastes from this facility. It is my understanding that this is an acceptable document to comply with: 40 CFR Part 268 and its revisions. This facility will continue to use this document on all future shipments of F-Solvent wastes.

If there are any questions concerning this correspondence, please contact me at (815) 459-5000 Ext. 2471.

Sincerely,

Donald Poggensee

NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE

To
Designated
Facility:

SAFETY KLEEN ENVIRONMENTAL SYSTEMS EPA ID No. ILLD 980613913

633 E. 138th ST.

DOLTON, IL 60419

Under manifest number ILL 189 0037 the generator noted below is shipping to you a waste determined to be restricted under 40 CFR Part 268. In accordance with 40 CFR 268.7, the generator is hereby providing notice that the waste is restricted and the appropriate treatment standards (from Table CCWE of 40 CFR 268.41) are as follows:

Constituent	Treatment Standard	
<u>TRICHLOROETHYLENE</u>	<u>0.01</u> ppm	Use reverse side
<u>TRICHLOROFLUOROETHANE</u>	<u>0.96</u> ppm	for additional
	ppm	constituents

The constituent compositions based upon () attached data or (X) knowledge of the waste.

TABLE CCWE - CONSTITUENT IN WASTE EXTRACT

F001-F005 spent solvents	Concentration (in mg/l)	
	Waste streams containing spent solvents	All other spent solvent wastes
Acetone	0.05	0.50
n-Butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	0.5	96
Chlorobenzene	15	0.5
Creosote (and creosylic acid)	2.82	75
Cyclohexanone	175	75
1,2-dichlorobenzene	60	125
Ethyl acetate	0.5	75
Ethyl benzene	0.6	0.53
Ethyl ether	0.5	75
Isobutanol	5.0	5.0
Methanol	25	75
Methylene chloride	20	96
Methylene chloride (from the pharmaceutical industry)	12.7	96
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	0.33
N-methyl pyrrolidone	0.65	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.075	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.41
1,2,2-Trichloro-1,2,2-trifluoroethane	1.05	0.96
Trichloroethylene	0.052	0.081
Trichlorofluoromethane	0.05	0.28
Xylene	0.05	0.15

Generator name SAFETY KLEEN ENVIRONMENTAL SYSTEMS EPA ID# ILLD 980613913

Generator representative signature [Signature]

Name & Title of representative DAVID W. HARRIS
(print or type)

NOTICE OF LAND DISPOSAL RESTRICTIONS OF WASTE

To SAFETY KLEEN CORP.
 Designated Facility: 1500 E. VILLA ST.
ELGIN, IL. 60120

EPA ID No. ILD000805911

Under manifest number IL1121100 the generator noted below is shipping to you a waste determined to be restricted under 40 CFR Part 268. In accordance with 40 CFR 268.7, the generator is hereby providing notice that the waste is restricted and the appropriate treatment standards (from Table CCWE of 40 CFR 268.41) are as follows:

Constituent	Treatment Standard	
<u>TRICHLOROETHYLENE</u>	<u>0.091</u> ppm	Use reverse side
	ppm	for additional
	ppm	constituents

The constituent compositions based upon () attached data or (X) knowledge of the waste.

TABLE CCWE - CONSTITUENT IN WASTE EXTRACT

	Concentration (in mg/l)	
R001-R008 spent solvents	Wastewater's containing spent solvents	All other spent solvent wastes
Acetone	0.05	0.50
n-Butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	.05	.90
Chlorobenzene	.15	.05
Cresole (and cresylic acid)	2.82	.75
Cyclohexanone	.125	.75
1,2-dichlorobenzene	.58	1.25
Ethyl acetate	.05	.75
Ethyl benzene	.05	.053
Ethyl ether	.05	.75
Isobutanol	5.0	5.0
Methanol	.25	.75
Methylene chloride	.20	.90
Methylene chloride (from the pharmaceutical industry)	12.7	.90
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	0.33
N-methylpyrrolidone	0.85	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.079	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.61
1,2,2-Trichloro-1,2,2-trifluoroethane	1.05	0.50
Trichloroethylene	0.052	0.051
Trichlorofluoromethane	0.05	0.50
Xylene	0.05	0.15

Generator name OAK SWITCH SYSTEMS EPA ID: ILD097278790
 Generator representative signature [Signature]
 Name & Title of representative DONALD W. POGGENSEE, FOREMAN
 (print or type)

NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE

To
Designated
Facility:

SAFETY KLEEN Corp.
1500 E. VILLAGE ST. P.O. Box 1419
ELGIN, IL. 60120

EPA ID No. ILD00080911

Under manifest number IL 1121098 the generator noted below is shipping to you a waste determined to be restricted under 40 CFR Part 268. In accordance with 40 CFR 268.7, the generator is hereby providing notice that the waste is restricted and the appropriate treatment standards (from Table CCWE of 40 CFR 268.41) are as follows:

Constituent	Treatment Standard	
<u>TRICHLOROETHYLENE</u>	<u>0.091</u> ppm	Use reverse side
<u>TRICHLOROETHYLENE</u>	<u>0.96</u> ppm	for additional
	ppm	constituents

The constituent compositions based upon () attached data or (X) knowledge of the waste.

TABLE CCWE - CONSTITUENT IN WASTE EXTRACT

F001-F005 spent solvents	Concentration (in mg/l)	
	Waste stream containing spent solvents	All other spent solvent wastes
Acetone	0.05	0.59
n-Butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	05	98
Chlorobenzene	15	05
Cresols (and cresylic acid)	2.82	75
Cyclohexanone	1.25	.75
1,2-dichlorobenzene	58	125
Ethyl acetate	05	.75
Ethyl benzene	08	053
Ethyl ether	05	.75
Isobutanol	3.0	5.0
Methanol	25	75
Methylene chloride	20	98
Methylene chloride (from the pharmaceutical industry)	12.7	98
Methyl ethyl ketone	0.08	0.75
Methyl isobutyl ketone	0.05	0.33
Naphthalene	0.65	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.073	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.41
1,2,2-Trichloro-1,2,2-trifluoroethane	1.05	0.98
Trichloroethylene	0.052	0.021
Trichlorofluoromethane	0.05	0.98
Xylene	0.05	0.13

Generator name OAK SWITCH SYSTEMS EPA ID No. ILD097278790
 Generator representative signature [Signature]
 Name & Title of representative DONALD W. POGGENSEE, FOREMAN
 (print or type)

07 MAR 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Don Pogensee
Oak Technology, Inc./Switch Division
100 South Main Street
Crystal Lake, Illinois 60014

Re: Notice of Violation
Oak Technology, Inc./Switch Division
ILD 097 278 790

Dear Mr. Pogensee:

On December 8, 1987, the Illinois Environmental Protection Agency (IEPA), representing the U.S. Environmental Protection Agency (U.S. EPA), conducted a Resource Conservation and Recovery Act (RCRA) inspection of the above-referenced facility. The purpose of the inspection was to determine the compliance status of your facility with respect to the applicable hazardous waste management requirements of RCRA, including the Land Disposal Restrictions of certain spent solvents. The land disposal restrictions became effective on November 8, 1986, (reference 51 Federal Register 40636: 40 CFR Part 268, and revisions to 40 CFR Parts 260-265 and 270).

With respect to the land disposal requirements section of the inspection, your facility was found to be in violation of the following land disposal requirement:

Failure to notify in writing for each shipment of F-solvent wastes the applicable treatment standard, U.S. EPA hazardous waste number, manifest number, and waste analysis data, if available as required by Section 268.7(a)(1).

A copy of the inspection report is enclosed for your records. Please submit to this office, within thirty (30) days of receipt of this Notice of Violation, documentation demonstrating that the above-cited violations have been corrected and indicating what measures have been initiated to assure future compliance. Failure to correct the violation may subject the facility to further Federal enforcement action.

1987	1988	1989	1990	1991	1992	1993	1994
22 3/2/88	27 3/2/88	P.SA 3/3/88	ap 3/3/88	WEM 3/3/88			

May 7, 1982

RECEIVED

MAY 13 1982

**ILL. E.P.A. - D.E.P.C.
STATE OF ILLINOIS**

Environmental Protection Agency
1701 S. First Street
Maywood, Illinois 60153

Dear Mr. Bechely:

This letter is in response to your letter #11101505-
McHenry County-Crystal Lake/* Oak Technology 1LD097278790.
(* Name changed to Oak Switch Systems, Inc.)

The following is a listing of the four deficiencies
and the respective corrective action, accordingly.

I Establish and Maintain Records Relating To The
Training of Personnel Involved in Hazardous
Waste Management

Training sessions will be held every six months regarding
the handling of hazardous wastes. These sessions will be
recorded along with a listing of personnel in attendance
and their respective job titles.

These sessions will also be documented by a memo from
the department foreman to the safety coordinator each
time they are held.

New employees will attend a session on the first day of
their assignment to the handling of hazardous wastes.
This will also be recorded and maintained in the department
files.

II The Owner/Operator Must Have a Contingency Plan At
The Facility. This Plan Must Address The actions to
be Taken by Facility Personnel in Response to Fires,
Explosions, or any Unplanned Release of Hazardous
Waste or Hazardous Constituents to the Environment.

A copy of the Oak Emergency Plan and Exit Routes is enclosed
("Exhibit A" 3 Pages).

Also enclosed is a copy of a layout showing the chemicals
used in the department and the respective location of each
("Exhibit B" 7 Pages). A copy of this location listing
has been submitted to the Crystal Lake Fire Department
for their files.

A telephone listing of all persons qualified to act as emergency coordinators is enclosed (Exhibit C" 1 Page).

A listing of the fire extinguishers and a location layout is enclosed ("Exhibit D" 4 Pages) and ("Exhibit E" 1 Page).

A copy of the Oak Safety Rules and Regulations is also enclosed ("Exhibit F" 1 Page).

III The Owner/Operator Must Have a Closure Plan at the Facility

A copy of the closure plan is enclosed ("Exhibit G" 1 Page).

IV Facilities that store Containers of Hazardous Waste Must Use Non-Leaking Containers in Good Condition and Containers That Are Compatible with Wastes In Them. These Must be Inspected at Least Weekly.

Our inspection procedure has been revised from a monthly basis to a weekly basis. A copy of the inspection record sheet is enclosed ("Exhibit H" 1 Page).

This record sheet will be maintained in the department files.

Sincerely,



John J. Kornacker

Director of Operations Engineering

cc:

Raymond W. Peirce - OII
Gary P. Barbera - OII
John P. Donohue - OSSI
Dominic Zullo - OII
Pete Weber - OSSI
Tom Duffy - OSSI
John Laing - OSSI
Steve Saban - OSSI
Andy Penrod - OSSI
Don Poggensee - OSSI



Environmental Protection Agency

1701 S. First Street Maywood, IL 60153 660

RECEIVED

APR 6 1982

WASTE MANAGEMENT BRANCH

EPA REGION V

312/345-9780

Refer to: 11101505 - McHenry County - Crystal Lake/Oak Technology
ILD097278790

April 1, 1982

Oak Technology, Inc.
100 S. Main Street
Crystal Lake, Illinois 60014

Oak Industries, Inc.
16935 W. Bernard
San Diego, CA. 92128

Dear Mr. Kornacker:

On July 28, 1981, representatives of the Illinois Environmental Protection Agency (IEPA) conducted an inspection of your facility. This inspection was conducted by the Illinois Environmental Protection Agency under a Cooperative Arrangement with, and authorization of, the United States Environmental Protection Agency (USEPA). The purpose of the inspection was to determine your facility's compliance status with the Resource Conservation and Recovery Act (RCRA) of 1976, P.L. 94-580, as amended. During the inspection the following deficiencies were observed:

Pursuant to 40 CFR 265.16, the owner/operator is required to establish and maintain records relating to the training of personnel involved in hazardous waste management, including a description of the job title for each position at the site, a written job description, a description of training and records detailing the training given to each such individual. The owner/operator is deficient in that these records were not available at the time of the inspection. III

The owner/operator must have a contingency plan at the facility. The contingency plan must address the actions to be taken by facility personnel in response to fires, explosions, or any unplanned release of hazardous waste or hazardous constituents to the environment. The plan must describe the arrangements agreed to by local police, fire departments, hospitals and emergency response teams. The names, addresses, and phone numbers of all persons qualified to act as emergency coordinators must be included in the plan. The contingency plan must list all emergency equipment at the facility, including the location, a physical description, and a brief summary of the capabilities of each item on the list. In facilities where evacuation could be necessary a plan describing evacuation routes and signals used to begin evacuation must be included in the contingency plan. These requirements are pursuant to 40 CFR Part 265 Subpart D. Your facility is deficient in that your contingency plan did not address personnel response to hazardous waste incidents. III

The owner/operator must have a closure plan at the facility. The plan must include a description of how and when the facility will be partially closed, if applicable, and ultimately closed. The plan must address the steps needed to decontaminate facility equipment. Also required is an estimate of the maximum inventory of wastes in storage or treatment on site at any given time and a schedule for final closure including the anticipated date when wastes will no longer be required. The owner/operator must submit his closure plan to the Regional Administrator at least 180 days before the date he expects to begin closure. These requirements are pursuant to 40 CFR 265.112. Your facility is deficient in that no plan was available at the time of the inspection. I

Facilities that store containers of hazardous waste must use nonleaking containers in good condition and containers that are compatible with the wastes in them. The containers must be stored closed and handled so as to not cause ruptures or leaks. Containers must be inspected at least weekly. Containers holding ignitable or reactive waste must be at least 50 feet from the facility property line. These requirements are pursuant to 40 CFR Part 265 Subpart I. Your facility is deficient in that the containers were not being inspected on a weekly basis as required by 265.174. II

You are hereby requested to submit to this office, within 15 days of receipt of this letter, a description of steps taken to correct the above deficiencies. Failure to correct these deficiencies may result in enforcement actions initiated by USEPA pursuant to 40 USC 6928. Please send your reply to the above address. Should you have any questions concerning this matter, please contact J. Evans of my staff at the above number.

Sincerely,



Kenneth P. Bechely, Northern Region Manager
Field Operations Section
Division of Land/Noise Pollution Control

KPB:JPE:prb

Enclosure: Inspection Report

cc: Division File
Northern Region
U.S. E.P.A. - Region V ✓

ENVIRONMENTAL PROTECTION AGENCY STATE OF ILLINOIS

L P C F C O 5 5 C
(1) (8) (9)

INSPECTION REPORT - SITE INVENTORY NO. 11101505
(11) (18)

CO. - L.P.C.

Region #

Date / /
(20) (25)

Letter Sent (Yes or No) (26)

(Location)

(Responsible Party)

Samples Taken: Yes () No () Time: From : : m

Ground Water() Surface() Other() To : : m

Photos Taken: Yes () No () Interviewed

Weather

Inspector (27) (29)

Previous Inspection Previous Correspondence

Site Open: Yes () No ()

OPERATIONAL STATUS:

TYPE OF OPERATION:

AUTHORIZATION:

Operating () Landfill () Storage () E.P.A. Permit ()

Temporarily Closed () Random Dump () Salvage () Variance ()

Closed Not Covered () Other () A.C.D. () 21(e) ()

Closed and Covered () Quantity Received Daily(1-6) Board Order ()

(30) Illegal (5) ()

(31)

IMPROVED

SAME

DETERIORATED

I S or D

(62)

GENERAL REMARKS:

INTERVIEW:

DIAGRAM:

were available at the time of inspection

1110150013 - /11101505
STATE IDENTIFICATION NUMBER
(If Applicable)

LD897278790
EPA IDENTIFICATION NUMBER

RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS
TREATMENT, STORAGE, AND DISPOSAL FACILITIES
Form A - General Facility Standards

I. General Information:

- (A) Facility Name: OAK Technology Inc Switch Division
(B) Street: As S. Main St
(C) City: Crystal Lake (D) State: IL (E) Zip Code: 60014
(F) Phone: 815-459-5000 (G) County: McHenry
(H) Operator: Same as above
(I) Street: _____
(J) City: _____ (K) State: _____ (L) Zip Code: _____
(M) Phone: _____ (N) County: _____
(O) Owner: OAK INDUSTRIES INC
(P) Street: 16935 W. Burnard Dr.
(Q) City: San Diego (R) State: Ca (S) Zip Code: 92120
(T) Phone: 714-435-9300 (U) County: _____
(V) Date of Inspection: 7-28-81 (W) Time of Inspection (From) 1:00pm (To) 2:30pm
(X) Weather Conditions: 66° / Cloudy - Windy

(Y)	Person(s) Interviewed	Title	Telephone
	<u>John Kurnacker</u>	<u>Director of Operations</u>	<u>815-459-5000</u>
	_____	_____	_____
	_____	_____	_____
(Z)	Inspection Participants	Agency/Title	Telephone
	<u>J. Evans</u>	<u>IEPA/E.P.S.</u>	<u>345-9780</u>
	<u>Colleen Stearns</u>	<u>IEPA/E.P.S.</u>	<u>345-9780</u>
	_____	_____	_____
(AA)	Preparer Information		
	Name <u>J. Evans</u>	Agency/Title <u>IEPA/E.P.S.</u>	Telephone <u>345-9780</u>

II. SITE ACTIVITY:

Complete sections I through VII for all treatment, storage, and/or disposal facilities. Complete the forms (in parenthesis) in section VIII corresponding to the site activities identified below:

- | | |
|---|---|
| <p><u>1</u> <input checked="" type="checkbox"/> A. Storage and/or Treatment</p> <p style="margin-left: 20px;">① Containers (I)</p> <p style="margin-left: 20px;">2. Tanks (J)</p> <p style="margin-left: 20px;">3. Surface Impoundments (K)</p> <p style="margin-left: 20px;">4. Waste Piles (L)</p> <p><u> </u> B. Land Treatment (M)</p> <p><u> </u> C. Landfills (N)</p> | <p><u> </u> D. Incineration and/or Thermal Treatment (O and P)</p> <p><u> ✓ </u> E. Chemical, Physical, and Biological Treatment (Q)</p> |
|---|---|

Note: If facility is also a generator or transporter of hazardous waste complete sections IX and X of this form as appropriate.

III. GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

	Yes	No	NI*	Remark
(A) Has the Regional Administrator been notified regarding:				
1. Receipt of hazardous waste from a foreign source?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Facility expansion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(B) General Waste Analysis:				
1. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Does the owner or operator have a detailed waste analysis plan on file at the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(C) Security - Do security measures include: (if applicable)				
1. 24-Hour surveillance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Artificial or natural barrier around facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Controlled entry?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Danger sign(s) at entrance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(D) Do Owner or Operator Inspections Include:				
1. Records of malfunctions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Records of operator error?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Records of discharges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

I GENERAL FACILITY STANDARDS continued

	Yes	No	NI*	Remarks
4. Inspection schedule?	✓	---	---	-----
5. Safety, emergency equipment?	✓	---	---	-----
6. Security devices?	✓	---	---	-----
7. Operating and structural devices?	✓	---	---	-----
8. Inspection log?	✓	✓	---	-----
(E) Do personnel training records include: (Effective 5/19/81)				
1. Job titles?	---	✓	---	-----
2. Job descriptions?	---	✓	---	-----
3. Description of training?	---	✓	---	-----
4. Records of training?	---	✓	---	-----
5. Have facility personnel received required training by 5-19-81?	---	✓	---	-----
6. Do new personnel receive required training within six months?	---	✓	---	-----
(F) If required are the following special requirements for ignitable, reactive, or incompatible wastes addressed?				
1. Special handling?	✓	---	---	-----
2. No smoking signs?	✓	---	---	-----
3. Separation and protection from ignition sources?	✓	---	---	-----

*Not Inspected

IV. PREPAREDNESS AND PREVENTION:
(Part 265 Subpart C)

(A) Maintenance and Operation
of Facility:

Is there any evidence of fire,
explosion, or release of
hazardous waste or hazardous
waste constituent?

Yes No NI* Remarks

☐ ☒ ☐

(B) If required, does the facility
have the following equipment:

1. Internal communications or
alarm systems?

☒ ☐ ☐

2. Telephone or 2-way radios
at the scene of operations?

☒ ☐ ☐

3. Portable fire extinguishers,
fire control, spill control
equipment and decontamination
equipment?

☒ ☐ ☐

Indicate the volume of water and/or foam available for fire control:

(C) Testing and Maintenance of
Emergency Equipment:

1. Has the owner or operator
established testing and
maintenance procedures
for emergency equipment?

☒ ☐ ☐

2. Is emergency equipment
maintained in operable
conditions?

☒ ☐ ☐

(D) Has owner or operator provided
immediate access to internal
alarms? (if needed)

☒ ☐ ☐

*Not Inspected

(E) Is there adequate aisle space for unobstructed movement?

✓

V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES:
(Part 265 Subpart D)

(A) Does the Contingency Plan contain the following information:

Yes No NI* Remarks

1. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable).)

— ✓ —

Company has Emergency plan for fire and to CNOC only

2. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?

— ✓ —

fire plan - 6. add passed familiar to local Fire Dept

3. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?

— ✓ —

4. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?

— ✓ —

5. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)

✓ — —

*Not Inspected

V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES - Continued

	Yes	No	NI*	Remarks
(B) Are copies of the Contingency Plan available at site and local emergency organizations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
(C) Emergency Coordinator				
1. Is the facility Emergency Coordinator identified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Is coordinator familiar with all aspects of site operation and emergency procedures?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
(D) Emergency Procedures				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

VI. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING (Part 265 Subpart E)

	Yes	No	NI*	Remarks
(A) Use of Manifest System				
1. Does the facility follow the procedures listed in §265.71 for processing each manifest?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are records of past shipments retained for 3 years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(B) Does the owner or operator meet requirements regarding manifest discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No need as of yet

*Not Inspected

VI. RECORDKEEPING - Continued

(C) Operating Record

1. Does the owner or operator maintain an operating record as required in 265.73?

✓

2. Does the operating record contain the following information:

**b. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in Appendix I?

✓

c. The location and quantity of each hazardous waste within the facility?

✓

***d. A map or diagram of each cell or disposal area showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)

J

e. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?

✓

f. Reports detailing all incidents that required implementation of the Contingency Plan?

✓

g. All closure and post closure costs as applicable? (Effective 5-19-81)

J

** See page 33252 of the May 19, 1980, Federal Register.

*** Only applies to disposal facilities

VII. CLOSURE AND POST CLOSURE (Part 265 Subpart G)

Yes	No	NI*	Remarks
-----	----	-----	---------

(A) Closure and Post Closure

1. Is the facility closure plan available for inspection by May 19, 1981?
2. Has this plan been submitted to the Regional Administrator
3. Has closure begun?
4. Is closure estimate available by May 19, 1981?

— / —

— ✓ —

— ✓ —

— ✓ —

— J —

(B) Post closure care and use of property

Has the owner or operator supplied
a post closure monitoring plan?
(effective by May 19, 1981)

VIII. FACILITY STANDARDS
(Part 265, Subparts I thru R)

USE AND MANAGEMENT OF CONTAINERS

Facility Name: _____ Date of Inspection: _____

Yes	No	NI*	Remarks
-----	----	-----	---------

1. Are containers in good condition?
2. Are containers compatible with waste in them?
3. Are containers stored closed?
4. Are containers managed to prevent leaks?
5. Are containers inspected weekly for leaks and defects?
6. Are ignitable & reactive wastes stored at least 15 meters (50 feet) from the facility property line?
(Indicate if waste is ignitable or reactive.)

✓	_____	_____
✓	_____	_____
✓	_____	_____
✓	_____	_____
✓	_____	_____
✓	_____	_____
_____	_____	✓

CONTAINERS ARE CHECKED
PERIODICALLY - AN
LOG IS KEPT OF INSPECTIONS
(NOT NECESSARILY ^{INTEREST} A
WEEKLY BASIS)

	Yes	No	NI*	Remarks
7. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

J
TANKS

Facility Name: _____ Date of Inspection: _____

1. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment structures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Do continuous feed systems have a waste-feed cutoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Are waste analyses done before the tanks are used to store a substantially different waste than before?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Are required daily and weekly inspections done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR 265.17(b) apply.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

8. Has the owner or operator observed the National Fire Protection Association's buffer zone requirements for tanks containing ignitable or reactive wastes?

Tank capacity: _____ gallons

Tank diameter: _____ feet

Distance of tank from property line _____ feet

(See table 2 - 1 through 2 - 6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

K
SURFACE IMPOUNDMENTS

Facility Name: _____

Date of Inspection: _____

1. Do surface impoundments have at least 60 cm (2 feet) of freeboard?
2. Do earthen dikes have protective covers?
3. Are waste analyses done when the impoundment is used to store a substantially different waste than before?
4. Is the freeboard level inspected at least daily?
5. Are the dikes inspected weekly for evidence of leaks or deterioration?
6. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a surface impoundment? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)
7. Are incompatible wastes stored in different impoundments? (If not, the provisions of 40 CFR 265.17(b) apply.)



WASTE PILES

Facility Name: _____

Date of Inspection: _____

	Yes	No	NI*	Remarks
1. Are waste piles covered or protected from dispersal by wind?	<u>U/A</u>	_____	_____	_____
2. Is each in-coming movement of waste analyzed before being added to the waste pile?	_____	_____	_____	_____
3. Are leachate, run-off, and run-on controlled as per the requirements of 265.258? (The effective date of this provision is Nov. 19, 1981.)	<u>U/A</u>	_____	_____	_____
4. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a pile? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)	_____	_____	_____	_____
5. Are piles of reactive or ignitable waste protected from materials or conditions that might cause them to ignite or react?	_____	_____	_____	_____
6. Are incompatible wastes stored in different piles? (If not, the provisions of 40 CFR 265.17(b) apply.)	_____	_____	_____	_____
7. Are piles of incompatible waste protected by barriers or distance from other waste?	_____	_____	_____	_____

M

LAND TREATMENT

Facility Name: _____

Date of Inspection: _____

1. Is treated hazardous waste capable of biological or chemical degradation?
2. Are run-off and run-on diverted from the facility or collected? (Effective date: November 19, 1981)?
3. Is waste analyzed according to 265.273?
4. If food chain crops are grown at the facility, has the owner or operator addressed the requirements of 265.276?
5. Is an unsaturated zone monitoring plan designed and implemented to detect the vertical migration of hazardous waste and provide information on the background concentrations of the hazardous waste available?
6. Does the unsaturated zone monitoring plan address the minimum information specified in 265.278?
7. Are records kept regarding application dates and rates, quantities, and locations, of all hazardous waste placed in the facility?
8. Are the special requirements fulfilled regarding land treatment of ignitable or reactive wastes? (Indicate if waste is ignitable or reactive.)
9. Are incompatible wastes land treated? (If yes, 265.17(b) applies)

N/A
↓

N
LANDFILLS

Facility Name: _____ Date of Inspection: _____

Yes No NI* Remarks

(A) General Operating Requirements
Does the facility provide the following:

**1. Diversion of run-on away from active portions of the fill?

**2. Collection of run-off from active portions of the fill?

**3. Is collected run off treated?

4. Control of wind dispersal of hazardous waste?

(**Effective 11-19-81)

(B) Surveying and Recordkeeping
Does the Operating Record Include:

1. A map showing the exact location and dimensions of each cell?

2. The contents of each cell and the location of each hazardous waste type within each cell?

(C) Closure and Post-Closure

1. Is the Closure Plan available for inspection by 5-19-81?

2. Has this plan been submitted to the Regional Administrator?

3. Has closure begun?

4. Is closure cost estimate available by 5-19-81?

(D) Special requirements for ignitable or reactive waste

Are ignitable or reactive waste treated so the resulting mixture is no longer ignitable or reactive?

	Yes	No	NI*	Remarks
(If waste is rendered non-reactive or non-ignitable see treatment requirements)				
If not, the provisions of 40 CFR 265.17(b) apply.				
(E) Special Requirements for Incompatible Wastes.				
Does the owner or operator dispose of incompatible wastes in separate cells?				
If not, the provisions of 40 CFR 265.17(b) apply.				
(F) Special requirements for liquid waste (effective 11-19-81)				
1. Are bulk or non-containerized liquids placed in the landfill?				
2. Does the landfill have a chemically and physically resistant liner system?				
3. Does the landfill have a functional leachate collection system?				
4. Are free liquids stabilized prior to or immediately after placement in the landfill?				
(G) Special requirements for Containers (effective 11-19-81)				
Are empty containers crushed flat, shredded, or similarly reduced in volume before being buried beneath the surface of the landfill?				

*Not Inspected

O and P
INCINERATION and THERMAL TREATMENT

(A) Facility Name: _____

(B) Date of Inspection: _____

I. Determination of Steady State

A. Type of unit (i.e., type of incinerator or thermal treatment): _____

B. Components and steady state condition:

**** Was this component at SS prior to adding waste?

Component	Yes	No	NI*	Remarks
1. _____	<input checked="" type="checkbox"/>	_____	_____	_____
2. _____	<input checked="" type="checkbox"/>	_____	_____	_____
3. _____	<input checked="" type="checkbox"/>	_____	_____	_____
4. _____	<input checked="" type="checkbox"/>	_____	_____	_____
5. _____	<input checked="" type="checkbox"/>	_____	_____	_____

II. Waste Analysis

A. Minimum requirements, for wastes not previously burned/treated.

1. Required analyses; has an analysis been performed for the following?	Yes	No	NI*	Remarks
a. Heating value	_____	_____	_____	_____
b. Halogen content	_____	_____	_____	_____
c. Sulfur content	_____	_____	_____	_____

*Not Inspected

	Yes	No	N	Remarks
2. Has documented or written data been substituted for analysis of either:				
a. Lead?	_____	_____	_____	_____
b. Mercury?	_____	_____	_____	_____

B. List other parameters for which the waste is tested to enable owner or operator to establish steady state or determine the types of pollutants which may be emitted. (Note in Remarks any which you feel should be tested.)

	Remarks
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

III. Monitoring and Inspections

	Yes	No	NI*	Remarks
A. Are combustion/emission control instruments monitored at least every 15 minutes?	<u>N/A</u>	_____	_____	_____
B. Is steady state maintained or corrections attempted?	_____	_____	_____	_____
C. Is stack plume observed at least hourly for normal color and opacity?	_____	_____	_____	_____
D. Did any stack observations made by owner or operator show a plume different than normal?**	_____	_____	_____	_____
E. If yes to D above, were corrections made to return emissions to normal appearance?**	_____	_____	_____	_____
F. Are the complete unit and associated equipment inspected daily for leaks, spills, and fugitive emissions?	_____	_____	_____	_____
G. Are emergency shutdown controls and system alarms checked daily for proper operation?	_____	_____	_____	_____

*Not Inspected

**Specify in Remarks for what period of time this was checked.

IV. Open Burning

A. Only complete this part if the facility open burns hazardous waste.

	Yes	No	NI*	Remarks
1. Does this facility burn <u>only</u> waste explosives? (A <u>No</u> answer means <u>other</u> hazardous waste is open-burned.)	—	—	—	—
2. If this facility open-burns waste explosives, does it burn the waste at a distance greater than or equal to the minimum specified distance (below)	—	—	—	—

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others		
0 to 100.....	204 m	670	ft
101 to 1,000.....	380 m	1,250	ft
1,001 to 10,000.....	530 m	1,730	ft
10,001 to 30,000.....	690 m	2,260	ft

Q

CHEMICAL, PHYSICAL and BIOLOGICAL TREATMENT

Facility Name: OAK Technology

Date of Inspection: 7/28/81

	Yes	No	NI*	Remarks
1. Is equipment used to treat only those wastes which will not cause leakage, corrosion, or premature failure?	—	—	✓	The Company is <u>currently manually</u>
2. Is a continuously fed system equipped with a means of hazardous waste inflow stoppage or control (e.g., cut-off system?)	—	—	✓	<u>treating</u> <u>chromic</u> <u>acid</u> <u>waste</u> <u>from</u> <u>hexavalent</u> <u>chrome</u> <u>to</u> <u>trivalent</u> <u>chrome</u>

*Not Inspected

	Yes	No	NI*	Remarks
3. Has the owner or operator addressed the waste analysis requirements of 265.402?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>This procedure is only</u>
4. Are inspection procedures followed according to 265.403?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>existing until they</u>
5. Are the special requirements fulfilled for ignitable or reactive wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>are able to find a site</u>
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>N/A</u>	<u>capable of handling so:</u>
				<u>waste stream.</u>

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutralize wastes which are hazardous only because they exhibit the corrosivity characteristic under 40 CFR §261.2 or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

IX

Complete this section if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

1. MANIFEST REQUIREMENTS

	Yes	No	NI*	Remarks
(A) Does the operator have copies of the manifest available for review?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(B) Do the manifest forms reviewed contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements)				
1. Manifest document number?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Name, mailing address, telephone number, and EPA ID Number of Generator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	Yes	No	NI*	Remarks
3. Name and EPA ID Number of Transporter(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Name, address, and EPA ID Number of Designated permitted facility and alternate facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. The total quantity of waste(s) and the type and number of containers loaded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Required certification?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Required signatures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(C) Does the owner or operator submit exception reports when needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2. PRE-TRANSPORT REQUIREMENTS

(A) Is waste packaged in accordance with DOT Regulations? (Required prior to movement of hazardous waste off-site)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(B) Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required to movement of hazardous waste off-site)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(C) If required, are placards available to transporters of hazardous waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Omit Section 3 if the facility has interim status and its Part A permit application describes storage

3. On Site Accumulation

	Yes	No	NI*	Remarks
1. Are containers marked with start of accumulation date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO NEED AS TO DATE</u>
2. Are the containers of hazardous waste removed from installation before they can accumulate for more than 90 days?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Are wastes stored in containers managed in accordance with 40 CFR Part 265.174 and 265.176 (weekly inspections of containers, containers holding ignitable or reactive wastes located at least 15 meters (50 Feet) from facility's property line?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. If wastes are stored in tanks, are the tanks managed according to the following requirements?				
a. Are tanks used to store only those wastes which will not cause corrosion leakage or premature failure of the tank?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, dikes, or other containment structures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Do continuous feed systems have a waste-feed cutoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Are required daily and weekly inspections done?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? (If waste is rendered non-reactive or non-ignitable, see treatment requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
f. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR §265.17(b) apply)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VI. RECORDKEEPING and REPORTING
(Part 262, Subpart D)

Yes No NI* Remarks

(A) Are Manifests, Annual Reports, Exception Reports, and all test results and analyses retained for at least three years?

☒

(B) Has the generator submitted Annual Reports and Exception Reports as required?

☒

VII. INTERNATIONAL SHIPMENTS
(Part 262, Subpart E)

Has the installation imported or exported Hazardous Waste?

☒

(If answered Yes, complete the following as applicable.)

1. Exporting Hazardous waste, has a generator:

a. Notified the Administrator in writing?

☐

b. Obtained the signature of the foreign consignee confirming delivery of the waste(s) in the foreign country?

☐

c. Met the Manifest requirements?

☐

2. Importing Hazardous Waste, has the generator:

Met the manifest requirements?

☐

X
TRANSPORTER REQUIREMENTS
40 CFR Part 263

Complete this Section if the owner or operator transports hazardous waste.

I. MANIFEST SYSTEM AND RECORDKEEPING
(Subpart B)

	Yes	No	NI*	Remarks
Are copies of the completed manifests or shipping paper(s) available for review and retained for three years?	_____	_____	_____	_____

II. INTERNATIONAL SHIPMENTS

A. Does the transporter record on the manifest the date the waste left the U.S.?	_____	_____	_____	_____
B. Are signed completed manifest(s) on file?	_____	_____	_____	_____

V. MISCELLANEOUS

A. Does transporter transport hazardous waste into the U.S. from abroad?	_____	_____	_____	_____
B. Does the transporter mix hazardous waste of different DOT shipping descriptions by placing them into a single container?	_____	_____	_____	_____

NOTE: If (A) or (B) were answered "Yes" then the Transporter is also a Generator and must comply with the Generator regulations.

*Not Inspected

REMARKS

Use this section to briefly describe site activities observed at the time of the inspection. Note any possible violations of Interim Status Standards.

Oak Technology manufactures switches, ie tuning switch for t.v.s etc.) The switches then go across the street to the company's ^{ELECTRO} plating operation; they undergo Cadmium and Zinc plating (Chromate is used in the ~~etc~~ Cadmium and Zinc plating) There is no Chromium plating)

Wastes ~~are~~ generated from the company's process are solvents and plating sludges. The currently plating sludges contain hexavalent chrome, ~~the~~ the company is manually treating the hexavalent chrome to trivalent chrome until they are able to find some one CAPABLE of handling this waste stream.

The ~~the~~ plating sludge is being ~~stocked~~ accumulated on site, and the solvents (degreasers) are going to waste research for recycling.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

September 8, 1993

Mr. John F. Berry
Oak Technology
100 South Main Street
Crystal Lake, IL 60014

Re: Visual Site Inspection
Oak Technology, Inc.
Crystal Lake, Illinois
ILD 097 278 790

Dear Mr. Berry:

The U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Kevin M. Pierard".

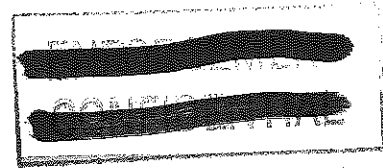
Kevin M. Pierard, Chief
Minnesota/Ohio Technical Enforcement Section
RCRA Enforcement Branch

CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE

007 19 005

Completed by: Mary Wojciechowski
Date: March 19, 1992

RELEASED
DATE 1/13/01
RIN #
INITIALS OK



Background Facility Information

Facility Name: Oak Technology, Inc.
EPA Identification No.: ILD 097 278 790
Location (City, State): Crystal Lake, Illinois
Facility Priority Rank: Low

1. Is this checklist being completed for one solid waste management unit (SWMU), several SWMUs, or the entire facility? Explain.

Entire facility - 10 SWMUs and 1 Area of Concern

Status of Corrective Action Activities at the Facility

2. What is the current status of HSWA corrective action activities at the facility?
- ☐ No corrective action activities initiated (Go to 5)
 - ☒ RCRA Facility Assessment (RFA) or equivalent completed
 - ☐ RCRA Facility Investigation (RFI) underway
 - ☐ RFI completed
 - ☐ Corrective Measures Study (CMS) completed
 - ☐ Corrective Measures Implementation (CMI) begun or completed

- ☐ Interim Measures begun or completed

3. If corrective action activities have been initiated, are they being carried out under a permit or an enforcement order?

- ☐ Operating permit
- ☐ Post-closure permit
- ☐ Enforcement order
- ☒ Other (Explain)

No actions are underway.

4. Have interim measures, if required or completed [see Question 2], been successful in preventing the further spread of contamination at the facility?

- ☐ Yes
- ☐ No
- ☐ Uncertain; still underway
- ☒ Not required

Additional explanatory notes:

It is currently not known if soil and ground-water contamination exists from the past use of two fuel oil USTs.

Facility Releases and Exposure Concerns

5. To what media have contaminant releases from the facility occurred or been suspected of occurring?

☒ Ground water
☐ Surface water
☐ Air
☒ Soils

6. Are contaminant releases migrating off-site?

☐ Yes; Indicate media, contaminant concentrations, and level of certainty.

Groundwater:

Surface water:

Air:

Soils:

☐ No
☒ Uncertain

- 7a. Are humans currently being exposed to contaminants released from the facility?

☐ Yes (Go to 8a)
☐ No
☒ Uncertain

Additional explanatory notes:

It is currently not known if soil and ground-water contamination exists from the past use of two fuel oil USTs.

- 7b. Is there a potential for human exposure to the contaminants released from the facility over the next 5 to 10 years?

☐ Yes
☐ No
☒ Uncertain

Additional explanatory notes:

It is currently not known if soil and ground-water contamination exists from the past use of two fuel oil USTs.

- 8a. Are environmental receptors currently being exposed to contaminants released from the facility?

☐ Yes (Go to 9)
☐ No
☒ Uncertain

Additional explanatory notes:

It is currently not known if soil and ground-water contamination exists from the past use of two fuel oil USTs.

- 8b. Is there a potential that environmental receptors could be exposed to the contaminants released from the facility over the next 5 to 10 years?

☐ Yes
☐ No
☒ Uncertain

Additional explanatory notes:

It is currently not known if soil and ground-water contamination exists from the past use of two fuel oil USTs.

Anticipated Final Corrective Measures

9. If already identified or planned, would final corrective measures be able to be implemented in time to adequately address any existing or short-term threat to human health and the environment?

☐ Yes
☐ No
☒ Uncertain

Additional explanatory notes:

It is currently not known if a threat exists.

10. Could a stabilization initiative at this facility reduce the present or near-term (e.g., less than two years) risks to human health and the environment?

☐ Yes
☐ No
☒ Uncertain

Additional explanatory notes:

It is currently not known if there is any risk.

11. If a stabilization activity were not begun, would the threat to human health and the environment significantly increase before final corrective measures could be implemented?

☐ Yes
☐ No

☐ Uncertain

Additional explanatory notes:

It is currently not known if a threat exists.

Technical Ability to Implement Stabilization Activities

12. In what phase does the contaminant exist under ambient site conditions? Check all that apply.

☐ Solid
☒ Light non-aqueous phase liquids (LNAPLs)
☐ Dense non-aqueous phase liquids (DNAPLs)
☒ Dissolved in ground water or surface water
☐ Gaseous
☐ Other _____

13. Which of the following major chemical groupings are of concern at the facility?

☒ Volatile organic compounds (VOCs) and/or semi-volatiles
☐ Polynuclear aromatics (PAHs)
☐ Pesticides
☐ Polychlorinated biphenyls (PCBs) and/or dioxins
☐ Other organics
☐ Inorganics and metals
☐ Explosives
☐ Other _____

14. Are appropriate stabilization technologies available to prevent the further spread of contamination, based on contaminant characteristics and the facility's environmental setting? [See Attachment A for a listing of potential stabilization technologies.]

☐ Yes; Indicate possible course of action.

☒ No; Indicate why stabilization technologies are not appropriate; then go to Question 18.

It is currently not known if soil and ground-water contamination exists from the past use of two fuel oil USTs.

15. Has the RFI, or another environmental investigation, provided the site characterization and waste release data needed to design and implement a stabilization activity?

☐ Yes
☐ No

If No, can these data be obtained faster than the data needed to implement the final corrective measures?

☐ Yes
☐ No

Timing and Other Procedural Issues Associated with Stabilization

16. Can stabilization activities be implemented more quickly than the final corrective measures?

☐ Yes
☐ No
☐ Uncertain

Additional explanatory notes:

17. Can stabilization activities be incorporated into the final corrective measures at some point in the future?

☐ Yes
☐ No
☐ Uncertain

Additional explanatory notes:

Conclusion

18. Is this facility an appropriate candidate for stabilization activities?

- ☐ Yes
- ☐ No, not feasible
- ☐ No, not required
- ☒ Further investigation necessary

Explain final decision, using additional sheets if necessary.

It is currently not feasible to determine the need for stabilization activities at this facility.

The facility has 2 10,000-gpd USTs that was used to store fuel oil until 1973. In 1973, the tanks were emptied and filled with water. There has been no leak testing of the tanks and no soil or ground-water sampling done in the vicinity of the tanks.



**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**OAK TECHNOLOGY, INC.
CRYSTAL LAKE, ILLINOIS**

ILD 097 278 790

RELEASED
DATE 11/13/01
RIN #
INITIALS SK

FINAL REPORT

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

Work Assignment No.	:	R05032
EPA Region	:	5
Site No.	:	ILD 097 278 790
Date Prepared	:	June 8, 1992
Contract No.	:	68-W9-0006
PRC No.	:	209-R05032-IL29
Prepared By	:	Dynamac Corporation (Russ Crittenden)
Telephone No.	:	(312) 466-0222
Contractor Project Manager	:	Shin Ahn
Telephone No.	:	(312) 856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	(312) 886-4448

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- A VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS
- B VISUAL SITE INSPECTION FIELD NOTES

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RELEASED
DATE 11/13/01
RIN #
INITIALS *SK*

~~ENFORCEMENT~~
~~CONFIDENTIAL~~

EXECUTIVE SUMMARY

Dynamac Corporation (Dynamac) performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Oak Technology, Inc. (OTI), facility in Crystal Lake, Illinois. This summary highlights the results of the PA/VSI and evaluates the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified.

The OTI facility manufactures switches and other electronic devices. The facility is located on 36 acres in a mixed land-use area in the city limits of Crystal Lake, Illinois. The facility was constructed by OTI in the 1930s. OTI moved most of its operations out of the facility in 1991. Currently, OTI operates one automatic screw machine, and leases a portion of the facility and several machines to HFR Precision Machining Company (HFR). HFR makes small metal parts from metal stock. OTI manages HFR wastes as well as their own.

At full production, the primary hazardous waste streams generated at the OTI facility were waste chromic acid (D002, D007), spent plating baths containing cyanide, cadmium and silver (F007, D006, D011), plating bath sludge containing cyanide, cadmium and silver (F007, D006, D011), waste degreasing solvents containing trichloroethene, 1, 1, 1 - trichloroethane, and trichlorotrifluoroethane (F001, F002, D001, D040), still bottoms containing trichloroethene, 1, 1, 1 - trichloroethane, and trichlorotrifluoroethane (F001, F002, D001, D040), waste naphtha (D001), and waste cleaning solvents containing xylene and acetone (F003, D001). Nonhazardous wastes included waste oil, scrap metal and empty drums. OTI generated these wastes from production of metal switches and related devices. In addition to these wastes, OTI has generated a number of additional wastes during the clean-up and shut-down of the facility. Currently OTI and HFR generate only waste degreasing solvents (F001, F002, D001, D040), still bottoms (F001, F002, D001, D040), waste oil, scrap metal, and empty drums during the production of metal parts.

In August 1980, OTI submitted a Notification of Hazardous Waste Activity to the EPA as a generator and storage facility. In November 1980, OTI submitted a RCRA Part A Permit Application as a generator and storage facility of hazardous wastes. The Part A identified three storage units; OTI began RCRA closure of each of these units in 1987. The closure involved the removal of all wastes and clean-up and soil sampling where appropriate. In 1988, OTI submitted a request to withdraw their Part A with the Illinois Environmental Protection Agency (IEPA). RCRA closure certification was approved by IEPA in 1989, based upon the closure activities performed by OTI contractors, an IEPA closure inspection, and certification by an independent engineer. OTI is currently regulated as a large-quantity generator of hazardous wastes, and OTI representatives stated that the facility does not store hazardous wastes for more than 90 days.

The PA/VSI identified the following 10 SWMUs and 1 AOC at the OTI facility:

Solid Waste Management Units

- 1 New Drum Storage Area
- 2 Plating Room
- 3 Covered Dock Area
- 4 Old Drum Storage Area
- 5 Waste Oil and Naphtha Storage Area
- 6 Waste Solvent Satellite Accumulation Drums
- 7 Precipitator
- 8 Roll-offs
- 9 Waste Oil Collection Drums
- 10 Scrap Metal Containers

Area of Concern

- 1 Underground Storage Tank (UST) Area

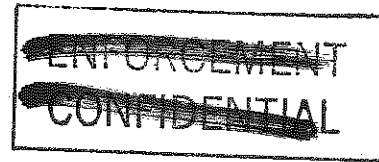
There have been no documented releases from any SWMU or AOC at the facility.

The potential for release to air from the facility SWMUs and AOCs is low. SWMUs 1, 5, and 6 manage volatile wastes, but the wastes are contained in closed drums. The remaining SWMUs do not currently manage volatile wastes. SWMUs 1, 2, 5, 6, 7, 9, and 10 are located indoors. The USTs in AOC 1 currently contain water.

The potential for release to the soil or ground water from the facility SWMUs is low because these SWMU are either indoors on a concrete floor or outdoors on concrete pads. The potential for release to soil and ground water from AOC 1 is moderate. The USTs originally contained fuel oil, but were emptied and filled with water in 1973. The facility has no record of how long the USTs were in use or if they had leaked prior to 1973. Ground water is encountered at an estimated depth of 40 feet below the ground surface and the surficial soils are composed largely of sand and gravel, which would allow rapid downward migration of contaminants.

The potential for release to surface water from the facility SWMUs is low because these SWMUs are located indoors on a concrete floor or outdoors on a extensive concrete pads. There is no pathway to surface water in the vicinity of the facility and all facility process water and run-off discharges to the city sewer and the Crystal Lake Wastewater Treatment Plant (WWTP). The facility is outside any 100-year flood plains. The potential for release to surface water from the facility AOC is low because there is little chance for a surficial release from the USTs.

The OTI facility is located near the downtown area of Crystal Lake, Illinois, which has a population of approximately 24,500 persons. The OTI facility is not fenced, but has



24-hour electronic security. The nearest surface water body is a five-acre pond located approximately one-half mile north of the facility. The nearest stream is an unnamed tributary to the Fox River located approximately two miles southwest of the facility. The Fox River is located approximately four miles southeast of the facility, and is used for recreational purposes, such as boating and fishing, but there are no drinking water intakes from the river in the area around Crystal Lake.

Sensitive environments within two miles of the facility include a total of approximately fifteen marshy wetlands characterized by emergent vegetation. The nearest wetland is a small marsh on the east side of the facility property. This marsh is less than one acre in size, as are the majority of others in the surrounding area. Four nearby wetlands are each more than 10 acres in size.

Persons in Crystal Lake obtain drinking water from wells drawing from the drift, shallow bedrock, and deep bedrock aquifers. The nearest municipal well is located approximately 100 feet south of the facility. This well is a back-up well used for emergencies only, an average of less than once a year. The back-up well is screened in the drift aquifer at a depth of 181 feet. The nearest full-time municipal wells are located approximately one mile south of the facility, and draw from all three aquifers. Ground-water flow direction is regionally east in the deep bedrock aquifer. Ground-water flow direction for the drift and shallow bedrock aquifers is unknown; however the area topography suggests that ground water in the drift aquifer may flow north in the area of the facility.

Dynamac recommends that the facility inspect SWMU 1 for leaking drums; however, no sampling at this unit is recommended at this time. Dynamac also recommends that the facility investigate whether or not the USTs in AOC 1 leaked fuel oil to soil or ground water.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. R05032 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in EPA Region 5. PRC assigned Dynamac Corporation (Dynamac), its TES 9 subcontractor, to conduct the PA/VSI for the Oak Technology, Inc. (OTI), facility in Crystal Lake, Illinois.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all SWMUs, identifying evidence of releases, initially identifying potential sampling locations, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of the PA/VSI of the OTI facility in Crystal Lake, Illinois, EPA ID No. ILD 097 278 790. Dynamac gathered and reviewed information from the offices of the Illinois Environmental Protection Agency (IEPA) in Springfield, Illinois and from EPA Region 5 RCRA files. The PA was completed on December 19, 1991.

Russ Crittenden and Valerie Farrell of Dynamac conducted the VSI on February 11, 1992. The VSI consisted of an interview with facility representatives and a walk-through of the facility. Dynamac identified 10 SWMUs and 1 AOC during the VSI.

The VSI is summarized and 21 inspection photographs are included in Attachment A. Field notes from the VSI are included in Attachment B.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

The OTI facility is located at 100 South Main Street, in the City of Crystal Lake, McHenry County, Illinois (latitude 42° 14' 42" N and longitude 88° 18' 50" W (USGS, 1962)) (See Figure 1). The facility occupies approximately 36 acres in a mixed industrial/residential/commercial area approximately one-quarter mile east of downtown Crystal Lake.

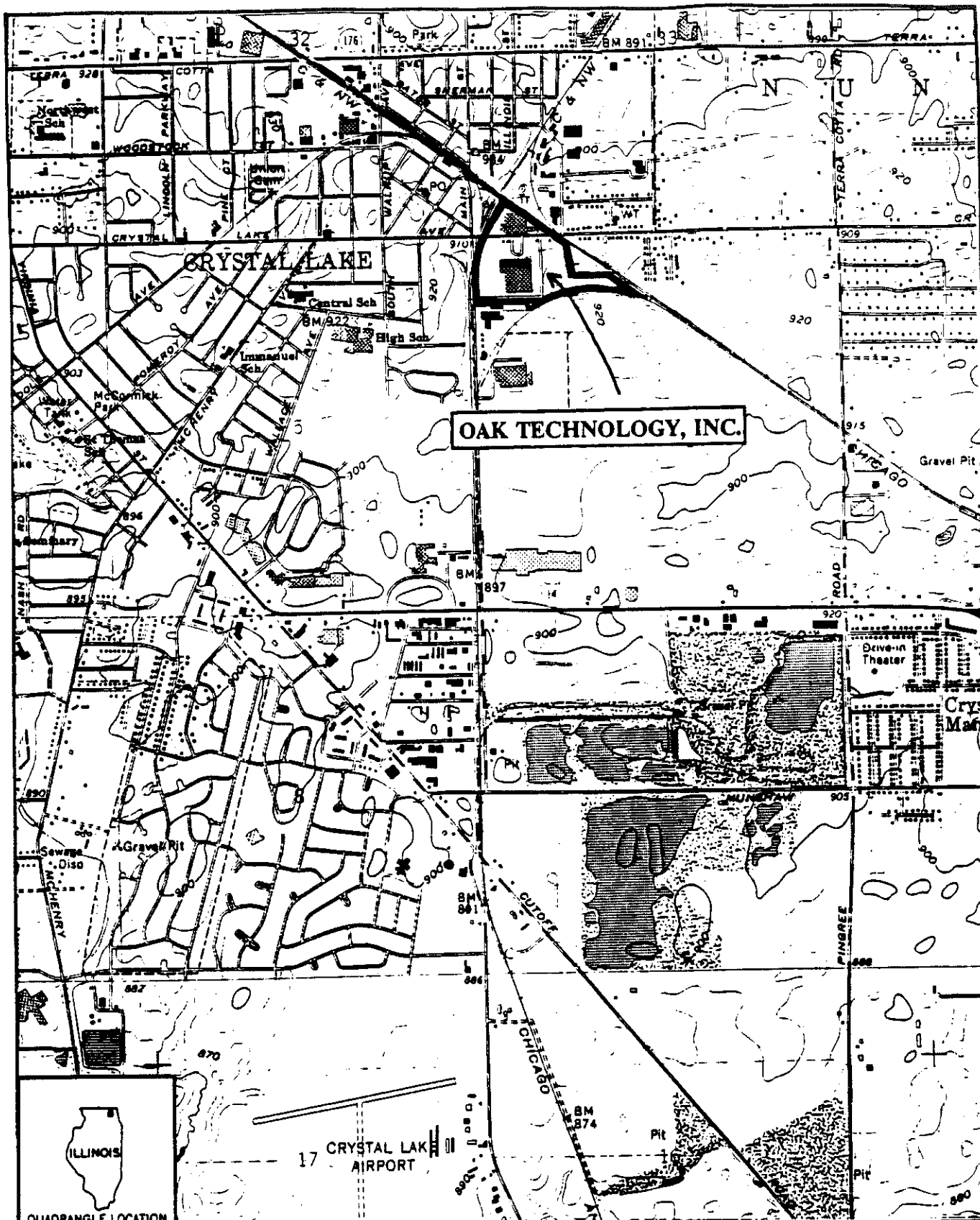
The OTI facility is triangular in shape and is largely bounded by Chicago and Northwestern Railroad tracks on its three sides. Main Street forms a portion of the western border of the facility. The facility has two buildings, Plant 1 on the south and Plant 2 on the north. The two buildings are separated by Crystal Lake Road. Access to the facility is from Main Street and from Crystal Lake Road. The facility is not fenced; OTI maintains electronic security for the buildings only.

2.2 FACILITY OPERATIONS

The OTI facility manufactures switches and other electronic devices. OTI has operated this facility since the 1930s. Until 1991, OTI conducted a variety of operations including metal cutting and shaping, soldering, degreasing, plating, etching, assembly, and occasional painting. There were no major changes in processes at the facility between the 1930s and 1991. During December 1991, OTI moved most of its operations from this facility to a new facility in Sugar Grove, Illinois. OTI is currently operating one automatic screw machine for metal working at the facility. Since late 1991, a portion of the tool room of the OTI facility has been leased to and operated by HFR Precision Machining Company (HFR) as a machine shop. According to facility representatives, all HFR waste streams are managed by OTI SWMUs.

Plant 1 is currently unused and vacant, and has an area of 200,000 ft². Plant 1 was built in 1962 and was primarily used for assembly. Plant 2, built in the 1930s, has an area of 96,000 ft² and houses all current facility operations and most of the facility SWMUs. Parking areas are located west and south of Plant 1. Softball fields, a wooded area, and a small wetland are located east of Plant 1. OTI currently employs two factory workers, but employed approximately 150 workers at full strength. HFR employs approximately six persons.

Flammable solvents were stored in drums in an outdoor fenced area west of Plant 2. All other raw materials were stored in locked areas within the two plants. OTI currently uses only metal stock, degreasing solvents, and oils in the current reduced operation.



SOURCE : Modified from USGS, 1962

SCALE = 1 : 24,000

NORTH

FIGURE 1

FACILITY LOCATION

There are 10 SWMUs at the OTI facility. The New Drum Storage Area (SWMU 1) is currently in use for storage of hazardous wastes for less than 90 days. The Plating Room (SWMU 2), Covered Dock Area (SWMU 3), and Old Drum Storage Area (SWMU 4) were formerly used for RCRA-permitted storage of hazardous wastes for more than 90 days. The Plating Room is still in use for less than 90-day storage of hazardous wastes, and the Covered Dock Area is still in use for storage of empty drums. The Old Drum Storage Area has not been used since 1987. The Waste Oil and Naphtha Storage Area (SWMU 5) and some of the Waste Solvent Satellite Accumulation Drums (SWMU 6) are still in use. The Precipitator (SWMU 7) was formerly used for treatment of hazardous cyanide-containing plating wastes, and has been inactive since 1991. The Roll-offs (SWMU 8) are temporarily at the facility to collect hazardous floor boards from the Plating Room. Some of the Waste Oil Collection Drums (SWMU 9) and Scrap Metal Containers (SWMU 10) remain at the facility.

Facility SWMUs are identified in Table 1. Figure 2 illustrates the OTI facility layout and Figure 3 shows the layout of Plant 2. Figures 2 and 3 show the locations of SWMUs and the AOC.

2.3 WASTE GENERATING PROCESSES

The primary hazardous waste streams routinely generated at the OTI facility are waste chromic acid (D002, D007), spent plating baths containing cyanide, cadmium, and silver (F007, D006, D011), plating bath sludge containing cyanide, cadmium, and silver (F007, D006, D011), waste degreasing solvents containing trichloroethene (TCE), 1, 1, 1 - trichloroethane (TCA), and trichlorotrifluoroethane (F001, F002, D001, D040), still bottoms containing TCE, TCA, and trichlorotrifluoroethane (F001, F002, D001, D040), waste naphtha (D001), and waste cleaning solvents containing xylene and acetone (F003, D001). Hazardous wastes generated as a result of shut-down and clean-up include waste inks containing xylene and polychlorinated biphenyls (PCBs) (F003, D001), waste paint containing toluene (F005, D001), floor sweepings containing cyanide, cadmium, and chromium (F008, D006, D007), floor boards from the plating area containing cyanide, cadmium, and chromium (F008, D006, D007), and unused soldering flux (D001, D002). The primary nonhazardous waste streams are waste oil, scrap metal, empty drums, and asbestos-containing-materials (ACM). Wastes generated at the facility are discussed below and are summarized in Table 2. Waste generation quantities given are from the most recent year of known generation rates, which is specified for each waste.

OTI used two chromic acid baths in conjunction with zinc and cadmium electroplating. Each bath capacity was approximately 20 gallons. OTI stored waste chromic acid (D002, D007) in drums in the Plating Room (SWMU 2) prior to its 1987 RCRA-closure. Between 1987 and 1991, OTI accumulated the waste chromic acid in a 55-gallon satellite accumulation drum in the Plating Room (SWMU 2). When this drum was full, OTI transferred it to the New Drum Storage Area (SWMU 1). In 1990, OTI shipped 440 gallons of waste chromic acid to Clean Harbors, Inc., in Braintree, Massachusetts, for neutralization and disposal. This waste has not been generated since 1991.

TABLE 1
SOLID WASTE MANAGEMENT UNITS (SWMU)

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
SWMU 1	New Drum Storage Area	No	Active for less than 90-day storage of hazardous waste.
SWMU 2	Plating Room	Yes	RCRA-closed, 1987. Active for less than 90-day storage of hazardous waste.
SWMU 3	Covered Dock Area	Yes	RCRA-closed, 1987. Active for storage of nonhazardous waste.
SWMU 4	Old Drum Storage Area	Yes	RCRA-closed, 1987. Inactive.
SWMU 5	Waste Oil and Naphtha Storage Area	No	Active for less than 90-day storage of hazardous wastes.
SWMU 6	Waste Solvent Satellite Accumulation Drums	No	Active for collection of hazardous wastes.
SWMU 7	Precipitator	No	Inactive.
SWMU 8	Roll-offs	No	Active for less than 90-day storage of hazardous wastes.
SWMU 9	Waste Oil Collection Drums	No	Active.
SWMU 10	Scrap Metal Containers	No	Active.

* A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

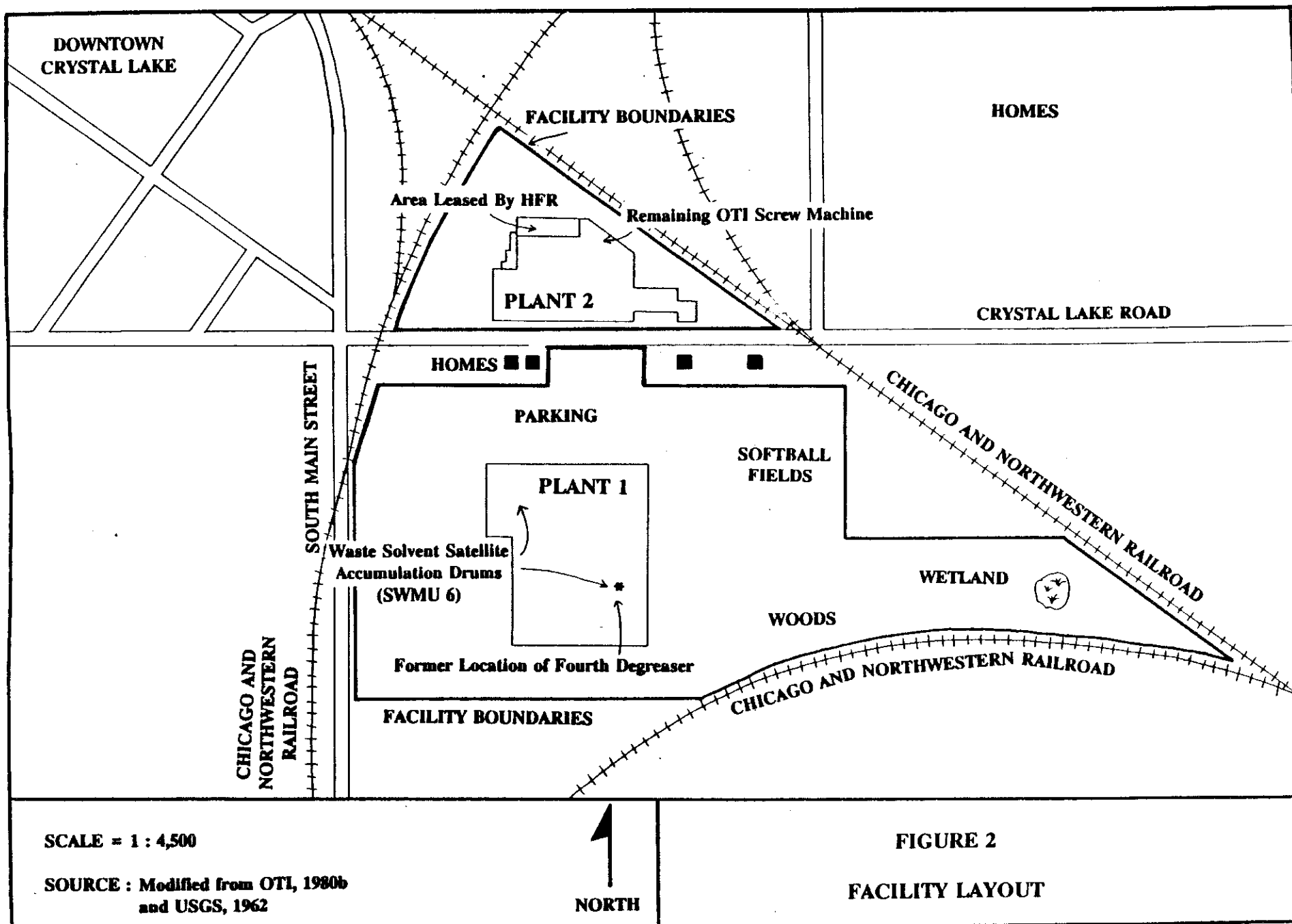
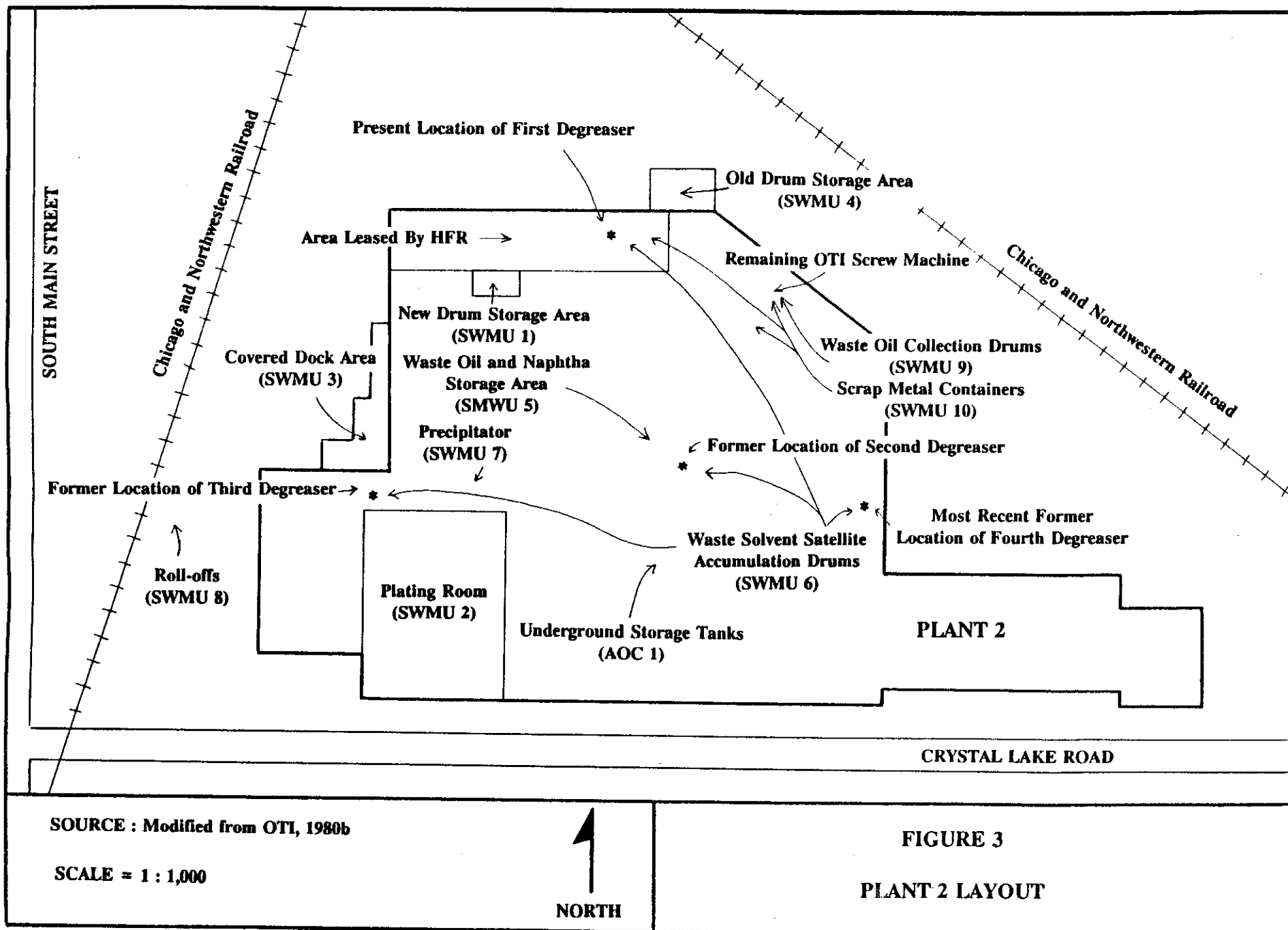


FIGURE 2
FACILITY LAYOUT



**TABLE 2
SOLID WASTES**

Waste/EPA Waste Code	Source	Primary Management Unit*
Waste chromic acid/ (D002, D007)	Plating operations	1, 2
Spent plating baths/ (F007, D006, D011)	Plating operations	2, 7
Plating bath sludge/ (F007, D006, D011)	Plating operations	1, 2, 7
Waste degreasing solvents/ (F001, F002, D001, D040)	Degreasing operations	1, 3, 4, 6
Still bottoms/ (F001, F002, D001)	Reclamation of waste degreasing solvent	1, 3, 4
Waste naphtha/ (D001)	Parts cleaning	1, 4, 5
Waste cleaning solvents/ (F003, D001)	Cleaning of circuits	1, 3, 6
Waste inks/ (F003, D001, PCBs)	Unused product	1
Waste paint/ (F005, D001)	Unused product	1
Floor sweepings/ (F008, D006, D007)	Cleanup of plating room	1
Floor boards/ (F008, D006, D007)	Cleanup of plating room	8
Soldering flux/ (D002, D001)	Unused product	1

* Primary management unit refers to a SWMU which currently manages or formerly managed the waste stream.

TABLE 2 - continued
SOLID WASTES

Waste/EPA Waste Code	Source	Primary Management Unit*
Waste oil/ NA**	Lubrication and machining	1, 5, 9
Scrap metal/ NA**	Machining operations	3, 10
Empty drums/ NA**	Consumption of products	3
ACM/ NA**	Insulation removal	1

* Primary management unit refers to a SWMU which currently manages or formerly managed the waste stream.

** Nonapplicable (NA) designates nonhazardous waste.

OTI used plating baths for zinc, copper, cadmium, nickel, silver, and gold electroplating of parts. These baths contained cyanide for brightening. When the plating baths were spent, OTI treated the baths by separating cyanide and metal containing sludge from the bath water. Prior to 1988, OTI treated the spent plating baths (F007, D006, D011) in a concrete tank in the Plating Room (SWMU 2). In 1988, the Precipitator (SWMU 7) was installed to replace the concrete treatment tank, but the treatment method remained the same. OTI discharged the treated bath water to the Crystal Lake Wastewater Treatment Plant (WWTP). The plating bath sludge containing cyanide, cadmium, and silver (F007, D006, D011) was collected in 55-gallon drums and stored in the Plating Room (SWMU 2) prior to its RCRA closure in 1987. From 1987 to 1991, the plating bath sludges were stored in the New Drum Storage Area (SWMU 1). In 1991, OTI shipped 435 gallons of plating bath sludge to Behr Precious Metals, Inc., in Rockford, Illinois for reclamation of the silver and gold, and disposal. This waste has not been generated since 1991.

The components and parts fabricated by OTI are coated with oil during cutting and machining. Most of this oil is removed from the finished parts in centrifuges, which circulate the oil back to the machines for reuse. The remaining oil is removed in vapor degreasers before the parts are electroplated. Prior to 1991, OTI used four degreasers located throughout the facility. Waste degreasing solvents containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040) were generated in the degreasers. One 55-gallon Waste Solvent Satellite Accumulation Drum (SWMU 6) was located next to each degreaser to collect the waste degreasing solvents. At the time of the VSI, one degreaser remained at the facility in the area leased by HFR, and there was one Waste Solvent Satellite Accumulation Drum (SWMU 6) next to the degreaser.

Prior to 1987, drums of waste degreasing solvent were stored at the Covered Dock Area (SWMU 3) and the Old Drum Storage Area (SWMU 4). SWMU 3 and SWMU 4 underwent RCRA closure in 1987. Since 1987, OTI has stored the drums in the New Drum Storage Area (SWMU 1). At regular intervals, OTI contacts a solvent recycler (Safety-Kleen in Dolton, Illinois or Avganic Industries in Cottage Grove, Wisconsin) to come to the facility and reclaim the spent solvents on-site. The reclamation is performed at the Covered Dock Area (SWMU 3). The reclamation of the solvents results in the generation of still bottoms containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040), which are accumulated in 55-gallon drums. Prior to 1987, still bottoms were stored in the Covered Dock Area and the Old Drum Storage Area (SWMU 4). Since 1987, still bottoms have been stored in the New Drum Storage Area (SWMU 1) until they are picked up by either Safety-Kleen, Avganic Industries, or Environmental Waste Resources in Coal City, Illinois, for fuel blending or disposal. In 1989, OTI shipped 55 gallons of still bottoms (designated F002 by the facility) to Safety-Kleen.

Waste naphtha (D001) is generated at the OTI facility from parts washers. Prior to 1991, OTI had four parts washers at the facility, but now there is only one parts washer located in the area leased by HFR. Prior to 1987, waste naphtha was stored in the Old Drum Storage Area (SWMU 4) and the Waste Oil and Naphtha Storage Area (SWMU 5) prior to shipment off-site. Since 1987, OTI has stored waste naphtha in the Waste Oil and Naphtha Storage Area and in the New Drum Storage Area (SWMU 1). Prior to moving, OTI also used other solvents for cleaning of circuit boards and other products. These waste cleaning solvents

containing xylene and acetone (F003, D001) were accumulated in a Waste Solvent Satellite Accumulation Drum (SWMU 6). Prior to 1987, these waste cleaning solvents were stored in the Covered Dock Area (SWMU 3). Between 1987 and 1991, OTI stored the waste cleaning solvents in the New Drum Storage Area (SWMU 1). In recent years, OTI has shipped their waste naphtha and waste cleaning solvents as part of their combined solvent waste stream (designated F003 by OTI), which totalled 110 gallons in 1989. Information on the annual quantities of the separate waste streams was not available.

OTI has generated several hazardous wastes during clean-up and shut-down of their operations, or from disposal of unused products. In 1989, OTI shipped 110 gallons of unused waste paint (designated F005 only by OTI, waste analysis not available) to Safety-Kleen in Dolton, Illinois. In 1990, OTI shipped 1,095 gallons of waste cleaning solvents along with unused and expired waste solvents as a combined waste stream (F003, D001). In 1990, OTI also shipped 150 gallons of waste inks containing xylene and PCBs (F003, D001) to ENSCO in Eldorado, Arkansas. These inks had been stored at the facility for many years as a product that was only considered a waste in 1990. These unused product wastes were stored in 55-gallon drums in the New Drum Storage Area (SWMU 1) while awaiting transport off site. In December 1991, OTI placed one 55-gallon drum of unused soldering flux (D001, D002) in the New Drum Storage Area (SWMU 1) to await shipment and off-site disposal.

In 1991, OTI began the cleanup of the plating room and generated 495 gallons of floor sweepings containing cyanide, cadmium and chromium (F008, D006, D007; designated F006 by OTI). The floor sweepings were stored in the New Drum Storage Area (SWMU 1) and shipped to Heritage Environmental Services in Lemont, Illinois. In December 1991, OTI removed the floor boards from the plating room and was storing them in seven 40-cubic-yard roll-offs (SWMU 8) at the time of the VSI. The floor boards are wood which absorbed spilled plating bath solutions over many years and contain cyanide, cadmium, and chromium (F008, D006, D007). The floor boards have been chipped and are awaiting shipment to Chemical Waste Management, Inc., for stabilization and disposal.

OTI generates nonhazardous waste oils from the lubrication of machinery and from spent cutting oils used on the metal work pieces. The waste oils are accumulated in steel 55-gallon Waste Oil Collection Drums (SWMU 9) located near each piece of machinery. The full drums of waste oil are stored in the New Drum Storage Area (SWMU 1) and the Waste Oil and Naphtha Storage Area (SWMU 5). Drums of waste oil were stored in the Old Drum Storage Area prior to its 1987 RCRA closure. OTI ships an average of 110 gallons of waste oil per year to Safety-Kleen, in Elgin, Illinois, for recycling.

Scrap metals, including steel, aluminum, and brass, are generated in the machining operations at OTI. These scrap metals are accumulated in separate Scrap Metal Containers (SWMU 10) such as 55-gallon drums and small bins. These small containers are emptied into 20-yard roll-offs at the Covered Dock Area (SWMU 3). OTI generates a total of approximately 30,000 pounds of waste metals per year. The scrap metals are picked up by Cozzi Iron and Metal, Inc., of Chicago, Illinois for recycling.

Empty drums are generated at the OTI facility from product usage, and are stored at the Covered Dock Area (SWMU 3). These drums are picked up by Cozzi Iron and Metal for recycling. OTI personnel were unable to provide information on the quantity of empty drums normally generated at the facility.

OTI generated waste asbestos-containing-materials (ACM) from the removal of pipe insulation during the shut-down and clean-up of the facility in 1991. The ACM is stored in plastic bags in the New Drum Storage Area (SWMU 1). In 1991, OTI shipped approximately 10 cubic yards of ACM to Browning-Ferris, Ind., in Waukegan, Illinois for disposal.

2.4 HISTORY OF DOCUMENTED RELEASES

There have been no documented releases to ground water, surface water, air, or soils at the OTI facility.

2.5 REGULATORY HISTORY

OTI submitted a Notification of Hazardous Waste Activity (EPA Form 8700-12) to EPA on August 4, 1980. OTI notified as a generator and storage facility of F001, F002, F006, F007, F008, F009, F010, F011, F012, P029, P030, P098, P099, P104, P106, U002, U226, U228, D001, D002, D003, and D000 (toxic) wastes (OTI, 1980a). The facility submitted a RCRA Part A permit application (Part A) on November 19, 1980, which covered both Plant 1 and Plant 2. The Part A indicated that the facility had a container storage capacity of 55 gallons and a tank storage capacity of 3,500 gallons. The map accompanying the Part A indicated three separate hazardous waste storage areas (SWMUs 2, 3 and 4). The Part A indicated that OTI generated a total annual quantity of 69,930 gallons of the same wastes listed on their EPA Form 8700-12 (OTI, 1980b). There is no further information available concerning the tank storage unit.

IEPA conducted RCRA compliance inspections at the OTI facility in 1981 and 1986. In 1981 IEPA found OTI was lacking complete documentation including training records, closure plan, contingency plan and storage area inspection logs. The inspection discussed waste management at the facility, but did not document any tank storage of wastes (IEPA, 1982). OTI responded to these violations in 1982 (OTI, 1982), but there is no documentation of IEPA follow-up. In 1986, IEPA found that the facility's Part A did not list storage of chromic acid (D002, D007) or waste cleaning solvents (F003, D001), as well as deficiencies in the contingency plan, operating record, waste analysis plan, and annual reporting (IEPA, 1986a). OTI responded to the IEPA violations on May 16, 1986, and included a revised Part A. The revised Part A listed a total of 55 gallons of container storage, and a total annual hazardous waste generation rate of 6,165 gallons of F001, F006, D001 and D002 wastes (OTI, 1986). Dynamac notes that the declared capacity probably refers to the size of the individual containers and does not reflect the facility's capacity for container storage. In June 1986, IEPA notified OTI that the facility had resolved its RCRA violations (IEPA, 1986b).

In 1987, OTI began RCRA-closure of three of their storage units: the Plating Room (SWMU 2), the Covered Dock Area (SWMU 3), and the Old Drum Storage Area (SWMU 4). The closure plan called for removal of all wastes, soil sampling (where appropriate), and clean-up of any spilled materials (SCL, 1986). The closure report was not available. On December 1, 1987, IEPA conducted a RCRA-closure inspection and found that OTI had followed the approved closure plan, but there was a discrepancy in whether the portion of the Covered Dock Area (SWMU 3) that underwent closure was the same portion where wastes had been stored (IEPA, 1987a). There was no information available in the files concerning how this issue was resolved.

On December 8, 1987, IEPA conducted a RCRA compliance inspection of the OTI facility, which was still regulated as a generator and storage facility. The compliance inspection found problems with waste identification, land disposal restriction (LDR) notifications, and incomplete operating records and inspection logs (IEPA, 1987b). The LDR violations were resolved on April 1988 (EPA, 1988), but no information on resolution of the other violations was available. There have been no RCRA inspections since 1987.

On April 6, 1988, OTI filed a Facility Part A Withdrawal Request Form with IEPA (OTI, 1988). On April 6, 1989, IEPA approved RCRA closure of the three storage areas (SWMUs 2, 3, and 4) (IEPA, 1989a). Closure approval was based upon OTI's closure activities, the IEPA closure inspection, and the certification of an independent engineer. The facility has been regulated as a large-quantity generator of hazardous wastes since 1989.

In 1973, OTI obtained two air emission permits for the facility, which were last renewed by IEPA in 1988 and 1989. Permit No. 111 015 ACL covered two natural gas boilers in Plant 2, and limited nitrogen oxide emissions to a maximum of 6.5 tons per year (IEPA, 1988). Permit No. 111 015 ACM covered six natural gas boilers, four electroplating lines and three vapor degreasers in Plant 1. Volatile organic emissions from the degreasers were permitted up to a maximum of 26.0 tons per year. Maximum permitted nitrogen oxide emissions from the boilers were 1.1 tons per year. Emissions from the plating lines were minimal (IEPA, 1989b). There is no documentation of IEPA air inspections or documentation that OTI exceeded the conditions of the air permits at any time.

In 1984, OTI obtained an Illinois Water Pollution Control permit for pretreatment of electroplating wastewater. The pretreatment system consisted of a concrete tank in the Plating Room (SWMU 2), which was replaced by a Precipitator (SWMU 7) in 1988. The Precipitator has been inactive since 1991, when OTI ceased plating operations. The treatment process destroyed cyanide and precipitated heavy metals through pH adjustment. The treated wastewater was discharged to the Crystal Lake WWTP at an average rate of 92,000 gallons per day. The discharge was regulated for cyanide, copper, nickel, chromium, zinc, lead, cadmium, total metals, and total toxic organics (IEPA, 1984).

According to Mr. Berry, OTI released approximately 20 gallons of untreated plating bath solution, containing 0.42 parts per million of cyanide to the WWTP in December 1988. In August 1991, OTI released approximately 200 gallons of untreated plating bath solution containing an unknown concentration of cyanide to the WWTP. These discharges were the

result of overfilling of plating baths, which spilled over into the sewer discharge in the plating room. According to Mr. Berry, the WWTP was notified of these discharges, but the quantities of cyanide discharged were not sufficient to disrupt the WWTP operations. There is no documentation of other incidents of permit violations.

The facility has no history of complaints from area residents. OTI does not and did not have any other waste water discharge other than to the WWTP and does not have a National Pollutant Discharge Elimination System permit. There is no CERCLA activity at this facility.

There are two 10,000-gallon underground storage tanks at the OTI facility. These USTs have been unused and filled with water since the early 1970s. Prior to that time, the USTs were used for fuel oil storage. There is no documentation of the exact age of the USTs.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the facility.

2.6.1 Climate

The OTI facility is located approximately 25 miles northwest of O'Hare International Airport, the nearest National Weather Service station. The climate in this area is continental with cold winters and warm summers. Lake Michigan has a moderating influence on temperature extremes, but this influence decreases westward. The average annual daily temperature is 49.2° Fahrenheit (°F). The highest average daily temperature is 73.0°F in July, and the lowest average daily temperature is 21.4°F in January (NOAA, 1990). Mean annual precipitation is 33.34 inches, and mean annual lake evaporation is approximately 30 inches; net annual precipitation is approximately 3 inches. The one-year 24-hour rainfall is approximately 2.4 inches (NOAA, 1979). The prevailing wind direction is west-southwest and the average wind speed is 10 miles per hour. The average wind speed is highest in April, at 12 miles per hour from the southwest (NOAA, 1990).

2.6.2 Flood Plain and Surface Water

The OTI facility is in an area of minimal flooding (FEMA, 1985), outside the 100-year floodplain of any surface water body. Storm water runoff in the area of the facility is directed to storm sewers and the Crystal Lake WWTP. Runoff does not directly enter any surface water body. The nearest surface water body is a small pond located one-half mile north of the facility. The nearest stream is an unnamed tributary located two miles southwest of the facility and flowing south to the Fox River. The Fox River flows generally south and passes approximately five miles to the east and southeast of the OTI facility (USGS, 1962). The Fox River discharges to the Illinois River near Ottawa, Illinois. The Fox River is used for fishing and boating, but is not used for drinking water in the Crystal Lake area.

2.6.3 Geology and Soil

The soil of the OTI facility is largely mapped as Warsaw silt loam to loam. The Warsaw soil is a deep, well drained to somewhat excessively drained, moderately to rapidly permeable soil formed on two to four feet of loess overlying calcareous loamy gravel drift. Other soils mapped at the OTI facility include Troxel silt loam, Sumner sandy loam and Volinia silt loam to loam. These soils are similar to the Warsaw soil except for slight variations in the depth of loess and permeability (UIAES, 1965).

The surficial deposits in the area around the OTI facility are mapped as the Haeger Till Member of the Wedron Formation and Batavia Member of the Henry Formation. The Haeger till is a thin yellow-gray sandy, gravelly silty till with abundant lenses of sand and gravel associated with it. The Batavia Member of the Henry Formation is a sandy, gravelly outwash deposit associated with the ice front which deposited the Haeger Till and underlies the Haeger Till in most areas. Beneath the outwash lies the Tiskilwa Till, a pink, sandy, silty till with some lenses of sand and gravel (Lineback, 1979). The total thickness of the glacial deposits is approximately 250 feet in the area of the facility (Hughes, Kraatz, and Landon, 1966).

The bedrock underlying the glacial deposits at the OTI facility consists of the basal portions of the Silurian-age dolomite. The dolomite is approximately 50 feet thick in this area and consists of well bedded, generally white or gray dolomite with cherty zones and occasional green or red shaly beds. Underlying these dolomites is the Ordovician-age Maquoketa Shale, which is red and oolitic at the top, and greenish gray and dolomitic at depth. The Maquoketa Shale is approximately 150 feet thick. Several thousand feet of Ordovician-age and Cambrian-age dolomites and sandstones underlie the Maquoketa Shale (Willman, 1971).

2.6.4 Ground Water

There is no facility-specific ground-water information available. Regionally, there are three aquifers: 1) a drift aquifer, 2) a shallow bedrock aquifer, and 3) a deep bedrock aquifer. The drift aquifer consists of sand and gravel deposits of outwash and lenses with the buried till. The aquifer is unconfined extends from the water table (estimated from surface water elevations on the topographic map at approximately 40 feet below ground surface (BGS)) to the bedrock at approximately 250 feet BGS. The drift aquifer is hydraulically connected to the underlying Silurian-age Dolomite, which comprises the shallow bedrock aquifer. The dolomite aquifer has variable characteristics due to variations in fracturing and solution openings. The shallow bedrock aquifer is approximately 50 feet thick, and is underlain by the Maquoketa Shale. The deep bedrock aquifer underlies the Maquoketa shale and comprises the Ordovician-age and Cambrian-age dolomites and sandstones. The Maquoketa Shale serves as a confining layer over the deep bedrock aquifer (Hughes, Kraatz, and Landon, 1966). The City of Crystal Lake obtains drinking water from all three aquifers. Ground-water flow direction in the drift and shallow bedrock aquifers is not documented for this area, but ground-water flow in the drift aquifer is most likely to be to the north, based on the topography of the area. Regionally, the deep bedrock aquifer flows to the east (Schicht, Adams, and Stall, 1976).

2.7 RECEPTORS

The OTI facility is located in Crystal Lake, Illinois, in a rapidly growing suburban area of the metropolitan Chicago region. Crystal Lake has a population of approximately 24,500 persons (Crystal Lake Water Department, 1992). The facility is located in a mixed residential/industrial area one quarter of a mile east of the downtown area of the city. The nearest residences are located on small lots between Plant 1 and Plant 2 along Crystal Lake Road. The facility is not fenced, but the buildings have 24-hour electronic security. The facility is principally bounded by Chicago and Northwestern Railroad tracks on the north, east, and south. South Main Street forms a portion of the western boundary. A manufacturing facility property shares a portion of OTI's southern boundary.

The nearest surface water body is a small pond (approximately five acres) located in Veterans Acres Park one-half mile north of the facility. Runoff in the area is directed to storm sewers and the Crystal Lake WWTP. Sensitive environments within two miles of the facility include approximately 15 mapped wetland areas. One small wetland area less than one acre in size is located on the OTI property southeast of the softball fields (See Figure 2). This wetland is a semi-permanent marsh of emergent vegetation. The wetlands in the surrounding area are also seasonal or semi-permanent marshes with emergent vegetation. These are mostly less than one acre in size, but there are four substantial wetland areas greater than 10 acres in size. There are also approximately 25 flooded gravel pits of varying sizes within two miles of the facility (USDI, undated).

Crystal Lake obtains its municipal water supply from six full-time wells and one emergency back-up well. Three of the full-time wells are screened in the deep bedrock aquifer at depths between 1,300 and 1,400 feet BGS. One well is screened in the uppermost portion of the shallow bedrock aquifer, and two full-time wells are screened at the base of the glacial outwash gravel. These three shallow wells are all at a depth of approximately 250 feet BGS. The emergency back-up well is screened at a depth of 181 feet BGS in the outwash gravel. The nearest well to the OTI facility is the emergency back-up well, located approximately 100 feet south of the facility. The nearest full-time wells are located approximately one mile south (upgradient) of the facility and include wells screened in all three aquifers (Crystal Lake Water Department, 1992).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the ten SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and Dynamac observations. Figures 2 and 3 show the SWMU locations.

SWMU 1

New Drum Storage Area

Unit Description:

The New Drum Storage Area is located inside Plant 2 near the northwest corner of the building (See Figure 3). The unit is used for less than 90-day storage of hazardous wastes generated throughout the facility. The unit consists of a designated floor area measuring approximately 15 feet by 25 feet. The unit has a concrete floor and a wooden berm. The unit has a capacity of approximately 100 drums (See Photo Nos. 1, 2, and 3).

Date of Startup:

This unit was first used in approximately 1985.

Date of Closure:

This unit is currently active.

Wastes Managed:

This unit is used for storage of drummed hazardous wastes generated throughout the facility. Routine hazardous wastes include the following: waste chromic acid (D002, D007); plating bath sludge containing cyanide, cadmium, and silver (F007, D006, D007, D011); waste degreasing solvents containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040); still bottoms containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040); waste naphtha (D001) and waste cleaning solvent containing xylene and acetone (F003, D001). Nonroutine hazardous wastes generated during the recent shut-down and clean-up of the facility include: waste inks containing xylene and PCBs (F003, D001, PCBs); waste paint containing toluene (F005, D001); floor sweepings containing cadmium, chromium, and silver (F008, D006, D007); and waste unused soldering flux (D001, D002). Except for the waste degreasing solvents, hazardous wastes are stored in this unit for less than 90 days prior to shipment off-site for disposal. Waste degreasing solvents are stored in this unit until a contractor is called to the facility for on-site reclamation of the waste degreasing solvents.

Nonhazardous waste oil from the Waste Oil Collection Drums (SWMU 9) and ACM generated from the removal of pipe

insulation during the shut-down and clean-up of the facility are also accumulated in this unit. Waste oil is shipped off-site for recycling and ACM is shipped off-site for disposal.

Release Controls: The unit is located indoors, on a concrete floor with no floor drains. There is a 5-inch wooden berm surrounding the area; prior to 1992 there was 8-foot steel cage fencing on top of the berm.

History of Documented Releases: There are no documented releases from this unit.

Observations: This unit contained a total of twenty-two 55-gallon drums of hazardous waste. The drums were closed, labeled, and dated; and appeared to be in sound condition. There were no stains or evidence of previous releases from this unit.

SWMU 2

Plating Room

Unit Description: The Plating Room is located in Plant 2 near the southwest corner of the building (See Figure 3). The unit has a complex history and has been used for hazardous waste storage, for less than 90-day storage, for waste plating bath water treatment, for satellite accumulation, and for collection of nonhazardous wastes generated at the facility. Most of the room was occupied by plating baths until 1991, when these baths were dismantled. The room is approximately 11,000-square feet in area and has a concrete floor and concrete trenches (See Photo Nos. 5, 6, and 7). Prior to the plating operation shut-down, the unit had a wooden floor on top of the concrete.

The capacity of the unit for hazardous waste storage is not documented; the facility Part A listed the total container storage capacity as 55 gallons. The capacity of the waste plating bath treatment tank is also undocumented. The capacity of the satellite accumulation drum was 55 gallons. The capacity for less than 90-day storage of untested, but potentially hazardous wastes is approximately 20 drums. The capacity for the collection of nonhazardous wastes is approximately 10 cubic yards.

Date of Startup: This unit began managing wastes at an unknown date prior to 1980.

Date of Closure: This unit was RCRA-closed in 1987. It is currently used for less than 90-day storage of untested but potentially hazardous wastes.

Wastes Managed: This unit managed or currently manages the following wastes: waste chromic acid (D002, D007); spent plating baths (F007, D006, D011); plating bath sludge containing cyanide, cadmium, and silver (F007, D006, D007, D011); small containers of unused products (i.e. paints, greases) awaiting lab-packing; and empty containers.

The southeast corner of the unit was used for storage of waste chromic acid and plating bath sludge under the facility Part A until 1987. From 1985 to 1991, waste chromic acid was accumulated in a 55-gallon satellite accumulation drum in the center of the unit. The waste chromic acid was shipped off-site for neutralization and disposal.

Prior to 1988, the plating bath sludge was generated through pH treatment and precipitation of spent plating baths (F007, D006, D011) in a 3,500-gallon concrete tank in the Plating Room. OTI drummed and shipped the plating bath sludges off-site for reclamation of metals, and disposal of the remainder. The treated waste water was discharged to the WWTP. The treatment tank was replaced by the Precipitator (SWMU 7) in 1988.

At the time of the VSI, a portion of the unit was being used for the accumulation of small containers of unused products intended for lab-packing. The unused products had not yet been tested to determine if they are hazardous. Another portion of the floor was being used for the accumulation of small, empty containers which had held paint, solvents, or acids. The containers had been emptied into drums at the New Drum Storage Area (SWMU 1), and were being accumulated for off-site disposal as nonhazardous waste.

Release Controls: The room is located inside Plant 2 and contains a concrete floor with concrete trenches which discharge to the city sewer and WWTP. The trenches are equipped with a pH alarm meter to prevent the discharge of untreated waste water.

History of Documented Releases: There are no documented releases from this unit.

Observations: This unit had undergone extensive clean-up after the shut-down of plating operations in 1991. This cleanup involved emptying, cleaning and dismantling of the plating baths, removal of the floor boards, and scraping of the concrete floor and trenches. At the time of the VSI, the concrete floor showed signs of corrosion in many areas, which Mr. Berry attributed to spillage from the plating baths (See Photo No. 5). The empty containers and the wastes intended for lab-packing were stored neatly and adequately contained (See Photo Nos. 6 and 7).

SWMU 3

Covered Dock Area

Unit Description: The Covered Dock is located outdoors, on the west side of Plant 2 (See Figure 3). The dock area measures approximately 2,000 square feet. The unit also includes a 10-cubic-yard roll-off for scrap metal located adjacent to the dock proper. Prior to 1987, the unit was used for storage of hazardous wastes generated at the facility. The unit is currently used for the storage of empty drums and nonhazardous scrap metal (See Photo No. 8). The unit has a capacity of approximately 200 empty drums and 10 cubic yards of scrap metal.

Date of Startup: This unit began managing wastes at an unknown date prior to 1980.

Date of Closure: This unit was RCRA-closed in 1987. It is currently used for the storage of empty drums from product usage and nonhazardous scrap metal generated from the machining operations.

Wastes Managed: This unit managed or manages the following wastes: waste degreasing solvents containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040); still bottoms containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040); waste cleaning solvent containing xylene and acetone (F003, D001); nonhazardous scrap metal; and empty drums. The unit was used for storage of hazardous wastes prior to 1987. Since then, the unit has managed only nonhazardous wastes. The unit is also used as a work area for the solvent reclaimer, which comes to the facility to reclaim the waste degreasing solvents.

Release Controls: The unit is located outdoors on a concrete dock that is covered with a corrugated steel roof. The drums are stored empty and closed, and scrap steel is contained in a 10-cubic-yard roll-off

located on the ground adjacent to the dock. Scrap aluminum and brass are stored on the dock in 55-gallon drums or other containers.

History of

Documented Releases: There are no documented releases from this unit.

Observations:

This unit contained approximately 50 empty 55-gallon drums during the VSI (See Photo No. 8). The scrap metal was contained in a 10-cubic-yard hopper that appeared to be in sound condition. Dynamac notes that scrap metal was scattered on the ground surrounding the hopper. No containers of scrap brass or aluminum were present at the unit during the VSI.

SWMU 4

Old Drum Storage Area

Unit Description:

This unit was formerly located outdoors, on the north side of Plant 2 (See Figure 3). It was used for storage of hazardous wastes in 55-gallon drums. The unit measured approximately 1,750-square feet in area and consisted of an unbermed, unfenced concrete pad. The unit had a capacity of approximately 150 drums (Photo not available).

Date of Startup:

This unit began managing wastes at an unknown date prior to 1980.

Date of Closure:

This unit was RCRA-closed in 1987 and has been inactive since that time.

Wastes Managed:

Prior to 1987 this unit managed the following hazardous wastes: waste degreasing solvent containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040); still bottoms containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040); and waste naphtha (D001). The unit has been inactive since 1987, and does not currently manage any wastes.

Release Controls:

This unit is outdoors on a concrete pad. There were no berms or other release controls.

History of

Documented Releases: There are no documented releases from this unit.

Observations:

The unit was vacant. There was no evidence of spills.

SWMU 5**Waste Oil and Naphtha Storage Area**

Unit Description: This unit is located near the center of Plant 2 (See Figure 3). The unit is used to store drums of waste naphtha generated by four parts washers formerly located at the facility and nonhazardous waste oil generated during machining operations. The unit consists of a 25-foot by 5-foot hallway that contains a concrete floor and brick walls (See Photo Nos. 9 and 10). The unit has a capacity of approximately ten 55-gallon drums.

Date of Startup: This unit was first used in the early 1980s.

Date of Closure: This unit is currently active.

Wastes Managed: This unit is used to accumulate waste naphtha (D001) and nonhazardous waste oil. OTI combines the waste naphtha with waste cleaning solvents and ships it off-site as a combined waste (F003, D001) for fuel blending.

Release Controls: The unit is located inside Plant 2, in a hallway constructed of brick. The floor is constructed of concrete and there are no floor drains.

History of Documented Releases: There are no documented releases from this unit.

Observations: This unit contained approximately eight 55-gallon drums of waste naphtha and waste oil at the time of the VSI. The drums were stored closed and there were no stains or evidence of releases.

SWMU 6**Waste Solvent Satellite Accumulation Drums**

Unit Description: This unit consists of five 55-gallon steel drums (See Figures 2 and 3). OTI formerly operated four degreasers at the facility and maintained a separate Waste Solvent Satellite Accumulation Drum for each degreaser. The first degreaser is located in the area leased by HFR in Plant 2 (See Photo No. 11). This is the only degreaser still operating at the facility. The second degreaser was located in the central portion of Plant 2 (See Photo No. 12). The third degreaser was located adjacent to the Plating Room (SWMU 2) (See Photo No. 13). The fourth degreaser was located in Plant 1 from 1987 to 1991, and was then moved to the east side of Plant 2 (See Photo Nos. 14 and 15). OTI removed the latter three of the degreasers in

1991. Until 1991, a fifth Waste Solvent Satellite Accumulation Drum was kept in the assembly area of Plant 1 for accumulation of waste cleaning solvents (See Photo No. 16).

Date of Startup: This unit was first used in approximately 1980.

Date of Closure: Three of the units were removed in 1991 and one unit is currently active.

Wastes Managed: This unit manages waste degreasing solvents containing TCA, TCE, and trichlorotrifluoroethane (F001, F002, D001, D040). When a drum is full, OTI transfers it to the New Drum Storage Area (SWMU 1). The waste degreasing solvent is stored until a sufficient quantity is accumulated. A solvent reclaimer is called to the facility to reclaim the solvents in the Covered Dock (SWMU 3). The reclamation generates still bottoms which are stored in the New Drum Storage Area (SWMU 1) and then shipped off-site for disposal. One drum of this unit was also used to accumulate waste cleaning solvents containing xylene and acetone (F003, D001). This waste was transferred to the New Drum Storage Area and shipped off-site for fuel blending.

Release Controls: The 55-gallon drums that managed the wastes were located indoors on a concrete floor and were kept closed while not being filled.

History of Documented Releases: There are no documented releases from this unit.

Observations: The 55-gallon drum located near the first degreaser was closed and appeared to be in sound condition (See Photo No. 11). All the former locations of Waste Solvent Satellite Accumulation Drums showed no evidence of spills, except the area in Plant 1 which held the drum used to accumulate waste cleaning solvents. This area had a tile floor which was stained and corroded (See Photo No. 16). Dynamac observed three full drums of waste degreasing solvent were located by a doorway in the northwest corner of Plant 2 (See Photo No. 4). These drums were intended to be transferred from the active degreaser to the New Drum Storage Area (SWMU 1).

SWMU 7**Precipitator**

Unit Description: This unit is located north of the Plating Room (SWMU 2) in Plant 2 (See Figure 3) and consists of a 1,000-gallon funnel shaped steel tank surrounded by a 16 inch containment wall (See Photo No. 17). The unit was used to treat the spent plating baths generated in the Plating Room (SWMU 2). The spent plating bath was pumped into the Precipitator, in which OTI adjusted the pH to destroy the cyanide and precipitate the metal-containing sludge. OTI discharged the treated waste water to the WWTP. OTI removed the resulting plating bath sludge and collected it in 55-gallon drums.

Date of Startup: This unit was first used in approximately 1988.

Date of Closure: OTI stopped using this unit in 1991 when the plating operations were shut down at this facility.

Wastes Managed: This unit managed spent plating bath containing cyanide (F007, D006, and D011) and the resulting plating bath sludge containing cyanide, cadmium, and silver (F007, D006, D011). The plating bath sludge (F007, D006, D011) was collected in 55-gallon drums and stored in the New Drum Storage Area (SWMU 1) for less than 90 days prior to shipment off-site for reclamation of the metals and disposal of the remainder.

Release Controls: This unit is located inside Plant 2 on a concrete floor. The unit is surrounded by a 16-inch containment wall.

History of Documented Releases: There are no documented releases from this unit.

Observations: This unit and the containment wall appeared to be in sound condition. The unit was inactive and there were no stains or evidence of releases.

SWMU 8**Roll-offs**

Unit Description: There are five 40-cubic yard steel Roll-offs located outdoors, on the west side of Plant 2 (See Figure 3). The units are steel and each is covered with a canvas tarp. OTI used the roll-offs to collect the floor boards that were removed from the Plating Room (SWMU 2) in late 1991 (See Photo No. 18).

Date of Startup: This unit was first used in 1991.

Date of Closure: This unit is currently active.

Wastes Managed: This unit manages floor boards containing cadmium, chromium, and silver (F008, D006, D007) that were removed during the clean-up of the plating room. Chemical Waste Management will ship the Roll-offs to Emelle, Alabama.

Release Controls: The units are located outdoors on a gravel pad and are covered with a canvas tarp.

History of Documented Releases: There are no documented releases from this unit.

Observations: The canvas tarps were fastened securely and the Roll-offs appeared to be in sound condition. There were no stains or evidence of releases from the unit.

SWMU 9

Waste Oil Collection Drums

Unit Description: This unit consists of two 55-gallon steel drums located indoors near the northeast corner of Plant 2 (See Figure 3). The unit is used to accumulate nonhazardous waste oils generated from the lubrication of machinery and spent cutting oils used on the metal work pieces. Prior to the shut-down of most of OTI's operations, there were an unknown number of Waste Oil Collection Drums near the various machinery.

Date of Startup: This unit began managing wastes at an unknown date prior to 1980.

Date of Closure: This unit is currently active.

Wastes Managed: This unit manages nonhazardous waste oils generated from the lubrication of machinery and spent cutting oils used on the metal work pieces. OTI transfers wastes from this unit to the New Drum Storage Area (SWMU 1) or the Waste Oil and Naphtha Storage Area (SWMU 5) prior to shipment off-site for recycling.

Release Controls: The unit is located inside Plant 2 and the wastes are contained in 55-gallon steel drums that are kept closed while not being filled.

History of Documented Releases:	There are no documented releases from this unit.
Observations:	At the time of the VSI there were two 55-gallon drums of waste oil in this unit. The drums were closed and appeared to be in sound condition. There were no stains or evidence of previous releases.
SWMU 10	Scrap Metal Containers
Unit Description:	The Scrap Metal Containers are located in many locations in Plant 2. The units consists of various containers including 55-gallon drums, small bins, and one-cubic yard roll-offs. The units are used to accumulated separated scrap metal including steel, aluminum, and brass. There were approximately 12 containers in use at the facility at the time of the VSI. The number of containers in use prior to the OTI shut-down is not known.
Date of Startup:	This unit began managing wastes at an unknown date prior to 1980.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit is used to manage separated nonhazardous scrap metal generated by the machining operations at the OTI facility. The scrap steel is transferred to a 10-cubic-yard roll-off at the Covered Dock (SWMU 3). The other scrap metals are transferred to the Covered Dock and stored in the collection containers. Scrap metal from this unit are ultimately shipped off-site for recycling.
Release Controls:	This unit is located indoors on a concrete floor. There are no other specific release controls associated with this unit.
History of Documented Releases:	There are no documented releases from this unit.
Observations:	At the time of the VSI, Dynamac observed approximately 12 Scrap Metal Containers throughout Plant 2. The containers appeared to be in sound condition and there was no evidence of releases.

4.0 AREAS OF CONCERN

Dynamac identified one AOC during the VSI. This AOC is discussed below. See Figure 3 for the location of the AOC.

AOC 1

UST Area

The OTI facility has two 10,000 gallon USTs located under the floor of Plant 2 (See Photo No. 21). The facility has no record of when the USTs were installed. The USTs were used for fuel oil storage. Around 1973, the facility switched to natural gas boilers and the USTs were emptied and filled with water. There have been no subsequent investigations of these USTs, and it is not known if they had leaked fuel oil before they were emptied. Dynamac considers the USTs an area of concern because it is possible that soils near the USTs were contaminated with fuel oil prior to 1973.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified 10 SWMUs and 1 AOC at the OTI facility. Background on the facility's location, operations, waste generating processes, documented release history, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed conditions is discussed in Section 3.0. AOCs are discussed in Section 4.0. Following are Dynamac's conclusions and recommendations for each SWMU and AOC. Table 3 identifies the SWMUs and AOC at the OTI facility and recommended further actions.

Dynamac's conclusions and recommendations for further action for each SWMU and the AOC are discussed below.

SWMU 1

New Drum Storage Area

Conclusions:

This unit is used for storage of 55-gallon drums of hazardous and nonhazardous wastes. The unit is a designated concrete-floored area in Plant 2 with a five-inch wooden berm. Two leaking drums were present at the time of the VSI, but were going to be emptied into new drums that day. There are no floor drains. The potential for release via environmental media is summarized below.

Air: Low to Moderate. Some of the drums contain volatile materials; although the drums are stored closed, at the time of the VSI two drums were leaking. However, the unit is located indoors and the likelihood of a release escaping outdoors is low to moderate.

Soils: Low. The unit is indoors on a concrete floor and there are no floor drains.

Ground Water: Low. The unit is indoors on a concrete floor and there are no floor drains.

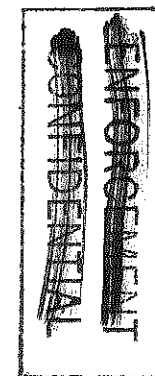
Surface Water: Low. The unit is indoors on a concrete floor and there are no floor drains. There is no pathway to surface water in the vicinity of the facility.

Recommendations:

The facility should inspect the unit frequently enough to spot potentially leaking drums and to transfer the contents before significant leakage occurs. No sampling is recommended at this time.

TABLE 3
SWMU AND AOC SUMMARY

<u>Solid Waste Management Unit</u>	<u>Operational Dates</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
1. New Drum Storage Area	1985 to present	None.	Inspect for leaking drums. No sampling is recommended at this time.
2. Plating Room	prior to 1980 to present	None.	None.
3. Covered Dock Area	prior to 1980 to present	None.	None.
4. Old Drum Storage Area	prior to 1980 to 1987	None.	None.
5. Waste Oil and Naphtha Storage Area	1980s to present	None.	None.
6. Waste Solvent Satellite Accumulation Drums	1980 to present	None.	None.
7. Precipitator	1988 to 1991	None.	None.
8. Roll-offs	1991 to present	None.	None.
9. Waste Oil Collection Drums	prior to 1980 to present	None.	None.
10. Scrap Metal Containers	prior to 1980 to present	None.	None.
<u>Area of Concern</u>	<u>Operational Dates</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
1. UST Area	1950s to 1973	None.	Investigate possible fuel oil contamination of soil and ground water.



SWMU 2

Plating Room

Conclusions:

This unit consists of a room in Plant 2 which was used for electroplating until 1991, and for management of a variety of wastes from prior to 1980 to the present. The room has a concrete floor with trenches which discharge to the municipal sewer. The outfall to the city sewer is equipped with a pH alarm, and a gate to prevent the release of untreated water and discharge to the WWTP. This unit contained a tank for treatment of spent plating baths (F007, D006, D011) until 1987. From sometime prior to 1980 until 1987, the southeast corner of this unit was used for storage of drums of waste chromic acid (D002, D007) and plating sludges (F007, D006, D011). The unit underwent IEPA-approved RCRA closure in 1987. From 1985 to 1991, waste chromic acid was accumulated in a 55-gallon satellite accumulation drum in the center of the floor. From 1991 to the present, the unit has been used for storage of small empty containers which held paint, grease and other products, and for accumulation of unused paints and solvents in small containers which will be lab-packed. The potential for release via environmental media is summarized below.

Air: Low. This unit is indoors and currently manages volatile hazardous wastes in small containers which will be lab-packed, but these small containers are closed. No other volatile wastes have been managed in the unit.

Soils: Low. The unit is located indoors on a concrete floor. The trenches in the floor discharge to the city sewer and WWTP.

Ground Water: Low. The unit is located indoors on a concrete floor. The trenches in the floor discharge to the city sewer.

Surface Water: Low. The unit is located indoors on a concrete floor. The trenches in the floor discharge to the city sewer. There is no pathway to surface water in the vicinity of the facility.

Recommendations:

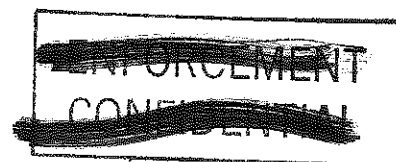
Dynamac recommends no further actions for this unit.

SWMU 3

Covered Dock Area

Conclusions:

This unit consists of a raised truck dock on the west side of Plant 2. The unit has a concrete floor and metal roof. The unit is currently used to store empty drums and scrap metal, and as a work area for reclamation of spent degreasing solvents



(F001, F002, D001, D040). The unit was a hazardous waste storage area for spent degreasing solvents and cleaning solvents (F003, D001) from sometime prior to 1980 until 1987. The unit underwent IEPA-approved RCRA closure in 1987. The potential for release via environmental media is summarized below.

Air: Low. This unit managed volatile materials in the past, but no longer does.

Soils: Low. This unit has a concrete floor. The empty drums and scrap metal are adequately contained. Soil sampling during RCRA-closure of this unit showed no contamination.

Ground Water: Low. This unit has a concrete floor. The empty drums and scrap metal are adequately contained. Soil sampling during RCRA-closure of this unit showed no contamination.

Surface Water: Low. This unit has a concrete floor. The empty drums and scrap metal are adequately contained. Storm water runoff is directed to the city sewer and WWTP. There is no pathway to surface water in the vicinity of the facility.

Recommendations:

Dynamac recommends no further actions for this unit.

SWMU 4

Old Drum Storage Area

Conclusions:

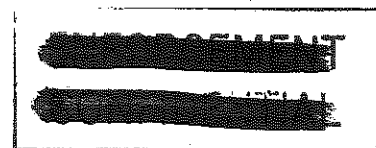
This unit consists of a concrete pad north of Plant 2. The unit was used for the storage of drums of waste degreasing solvents (F001, F002, D001, D040), waste cleaning solvents (F003, D001), and waste naphtha (D001) from sometime prior to 1980 to 1987. The unit underwent RCRA closure in 1987. The potential for release via environmental media is summarized below.

Air: Low. This unit is inactive.

Soils: Low. This unit is inactive. Soil sampling during RCRA-closure of this unit showed no contamination.

Ground Water: Low. This unit is inactive. Soil sampling during RCRA-closure of this unit showed no contamination. This unit is located indoors on a concrete floor.





Surface Water: Low. This unit is inactive. Soil sampling during RCRA-closure of this unit showed no contamination. Storm water runoff is directed to the city sewer and WWTP. There is no pathway to surface water in the vicinity of the facility.

Recommendations: Dynamac recommends no further actions for this unit.

SWMU 5

Waste Oil and Naphtha Storage Area

Conclusions: This unit consists of a concrete-floored hallway inside Plant 2. The unit is used for storage of waste naphtha (D001) and nonhazardous waste oil. The potential for release via environmental media is summarized below.

Air: Low. The drums contain volatile materials, but are stored closed and indoors.

Soils: Low. The unit is indoors on a concrete floor and there are no floor drains.

Ground Water: Low. The unit is indoors on a concrete floor. There are no floor drains.

Surface Water: Low. The unit is indoors on a concrete floor. There are no floor drains. There is no pathway to surface water in the vicinity of the facility.

Recommendations: Dynamac recommends no further actions for this unit.

SWMU 6

Waste Solvent Satellite Accumulation Drums

Conclusions: This unit consists of five 55-gallon drums used to accumulate waste degreasing solvents (F001 F002, D001, D040) and waste cleaning solvents (F003, D001) when the plant was fully operational in 1991. Four of these drums were located next to degreasers and one was located in Plant 1. At the time of the VSI, only one of these drums was active; this drum was located near the degreaser used by HFR in Plant 1. The potential for release via environmental media is summarized below.

Air: Low. The drums contain volatile materials, but are stored closed and indoors.

Soils: Low. The unit is indoors on a concrete floor and there are no floor drains.

Ground Water: Low. The unit is indoors on a concrete floor. There are no floor drains.

Surface Water: Low. The unit is indoors on a concrete floor. There are no floor drains. There is no pathway to surface water in the vicinity of the facility.

Recommendations: Dynamac recommends no further actions for this unit.

SWMU 7

Precipitator

Conclusions:

This unit consists of a large funnel-shaped 1,000-gallon tank used for treatment of plating waste water until 1991. A 16-inch concrete berm surrounded the tank, which was located on a concrete floor in Plant 2. The treatment consisted of pH adjustment to destroy cyanide and precipitate heavy metals. The treated waste water was discharged to the city WWTP. The plating sludge precipitated from the water was collected in 55-gallon drums and stored in the New Drum Storage Area. The potential for release via environmental media is summarized below.

Air: Low. The unit is inactive. No volatile materials were managed in this unit. Cyanide was prevented from volatilizing through pH adjustment, which chemically destroyed the cyanide.

Soils: Low. The unit is inactive and indoors on a concrete floor. There are no floor drains.

Ground Water: Low. The unit is inactive and indoors on a concrete floor. There are no floor drains.

Surface Water: Low. The unit is inactive and indoors and had a permitted discharge to the city WWTP. There is no pathway to surface water in the vicinity of the facility.

Recommendations: Dynamac recommends no further actions for this unit.

SWMU 8

Roll-offs

Conclusions:

This unit consists of a five 40-cubic-yard roll-offs filled with chipped wooden floor boards (F008, D006, D007) from the plating room. The roll-offs were filled in December 1991. They are in good condition and covered with tarps, and will be transported from the facility for stabilization and disposal in the near future. The potential for release via environmental media is summarized below.

Air: Low. These units do not manage volatile wastes and are covered with tarps.

Soils: Low. The roll-offs are adequate to contain the chipped floor boards.

Ground Water: Low. The roll-offs are adequate to contain the chipped floor boards.

Surface Water: Low. The roll-offs are adequate to contain the chipped floor boards. Storm water runoff is directed to the city sewer and WWTP. There is no pathway to surface water in the vicinity of the facility.

Recommendations: Dynamac recommends no further actions for this unit.

SWMU 9

Waste Oil Collection Drums

Conclusions:

This unit consists of 55-gallon drums located in the machining areas which are used to collect waste oil. The number of drums was variable in the past, but two collection drums are currently located near the OTI automatic screw machine. The potential for release via environmental media is summarized below.

Air: Low. The waste oil is not a volatile material, and the drums are stored closed and indoors.

Soils: Low. The unit is indoors on a concrete floor. There are no floor drains.

Ground Water: Low. The unit is indoors on a concrete floor. There are no floor drains.

Surface Water: Low. The unit is indoors on a concrete floor. There are no floor drains. There is no pathway to surface water in the vicinity of the facility.

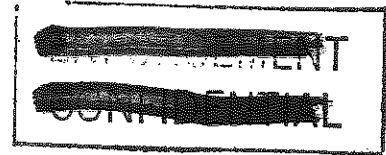
Recommendations: Dynamac recommends no further actions for this unit.

SWMU 10

Scrap Metal Containers

Conclusions:

This unit consists of a variety of containers such as steel drums and hoppers used to collect scrap metals (steel, aluminum, and brass) generated in metal cutting and machining operations.



There are currently approximately 10 scrap metal containers at the facility, all located indoors on a concrete floor in Plant 2. The potential for release via environmental media is summarized below.

Air: Low. The scrap metal has an oil coating which is not a volatile material. Also, these containers are stored indoors.

Soils: Low. The unit is indoors on a concrete floor. There are no floor drains.

Ground Water: Low. The unit is indoors on a concrete floor. There are no floor drains.

Surface Water: Low. The unit is indoors on a concrete floor. There are no floor drains. There is no pathway to surface water in the vicinity of the facility.

Recommendations: Dynamac recommends no further actions for this unit.

AOC 1

UST Area

Conclusions:

This area includes of two steel 10,000-gallon USTs located under the floor of Plant 2. These USTs were used for fuel oil storage at sometime prior to 1973. In 1973, the USTs were emptied and filled with water. The USTs have been designated an AOC because it is possible that they had leaked fuel oil prior to being emptied. OTI has not conducted an investigation of the USTs or the surrounding soils. The potential for release via environmental media is summarized below.

Air: Low. The USTs are not currently filled with a volatile material. Prior to 1973, there was a low potential for product which may have leaked into the surrounding soils to volatilize to the atmosphere because the USTs were covered by a concrete floor.

Soils: Moderate. These USTs were used for fuel oil storage for at least 20 years before they were emptied, according to Mr. Berry. No soils investigation has been performed to confirm a possible release.



Ground Water: Moderate. If the USTs did leak to surrounding soils, the fuel oil would easily migrate downward through the sand and gravel drift deposits. Ground water is estimated to be approximately 40 feet BGS.

Surface Water: Low. There has been no surficial release of contaminants, and the USTs now contain only water.

Recommendations:

Dynamac recommends that OTI conduct a soil and ground water investigation of this area to determine the extent of any fuel oil release which may have occurred.

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ATTACHMENT A

**VISUAL SITE INSPECTION SUMMARY
AND PHOTOGRAPHS**

VISUAL SITE INSPECTION SUMMARY

Oak Technology Inc. (OTI)
Crystal Lake, Illinois
ILD 097 278 790

Date: February 11, 1992

Facility Representatives: John Berry, Manager of Industrial Engineering

Inspection Team: Russ Crittenden, Dynamac Corporation
Valerie Farrell, Dynamac Corporation

Photographer: Valerie Farrell, Dynamac Corporation

Weather Conditions: Overcast, temperature about 35° F

Summary of Activities: The visual site inspection (VSI) began at approximately 8:10 a.m. with an introductory meeting. The inspection team discussed the purpose of the VSI and the agenda for the visit. John Berry then discussed the OTI facility's past and current operations, solid wastes generated, and release history. Most of the information was exchanged on a question-and-answer basis. John Berry then provided the inspection team with copies of documents requested.

The VSI tour began at about 9:40 a.m. Mr. Berry discusses specific operations at each area as the inspection team walked through the current and former production areas. The tour began inside Plant 2 where Dynamac observed the following SWMUs: the Waste Solvent Satellite Accumulation Drums (SWMU 6); the Waste Oil Collection Drums (SWMU 9); the Scrap Metal Containers (SWMU 10); the Waste Oil and Naphtha Storage Area (SWMU 5); the New Drum Storage Area (SWMU 1); the Precipitator (SWMU 7); and the Plating Room (SWMU 2).

Visual Site Inspection Summary
Oak Technology Inc.
February 11, 1992

Mr. Berry indicated that the area on the north side of Plant 2 is currently occupied by HFR Precision Machining Company (HFR). HFR rents a small portion of Plant 2 from OTI. Mr. Berry then showed the inspection team the Covered Dock (SWMU 3), the Roll-offs (SWMU 8), and the Old Drum Storage Area located just outside of Plant 2. Mr. Berry then led the inspection team south across Main Street to Plant 1 where we observed two former locations of Waste Solvent Satellite Accumulation Drums (SWMU 6).

The facility tour concluded at approximately 10:55 a.m., after which the inspection team held an exit meeting with John Berry. Dynamac completed the VSI and left the facility at approximately 11:40 a.m.



Photo No.: 1
Orientation: Northwest
Description: New Drum Storage Area. Note remaining section of fencing which formerly surrounded the unit. Berm is constructed of wood.

Location: SWMU 1

Date: February 11, 1992



Photo No.: 2
Orientation: North
Description: New Drum Storage Area. Two empty drums in foreground will be filled from two leaking drums immediately behind them.

Location: SWMU 1

Date: February 11, 1992



Photo No.: 3
Orientation: Northeast
Description: New Drum Storage Area. Note plastic bags of asbestos containing material.

Location: SWMU 1

Date: February 11, 1992



Photo No.: 4
Orientation: West
Description: Three full drums of waste degreasing solvent. These drums were intended to be placed in the New Drum Storage Area, but had been placed by this doorway instead.

Location: HFR Area

Date: February 11, 1992



Photo No. : 5
 Location : SWMU 2
 Orientation : South
 Date : February 11, 1992
 Description : Plating Room.
 Area formerly used as satellite
 accumulation for waste chromic acid.



Photo No.: 6
 Orientation: South
 Description: Plating Room. Area currently used for collection of empty containers to be discarded.

Location: SWMU 2
 Date: February 11, 1992



Photo No.: 7 **Location:** SWMU 2
Orientation: West **Date:** February 11, 1992
Description: Plating Room. Area currently used for accumulation of small cans of unused products to be disposed of in lab packs.



Photo No.: 8 **Location:** SWMU 3
Orientation: Southeast **Date:** February 11, 1992
Description: Covered Dock used for empty drum and scrap metal storage.

Photo No. : 9
Location : SWMU 5
Orientation : North
Date : February 11, 1992
Description : Waste Oil and Naphtha
Storage Area. Portion of hallway showing one
drum of waste naphtha and one drum of waste oil.

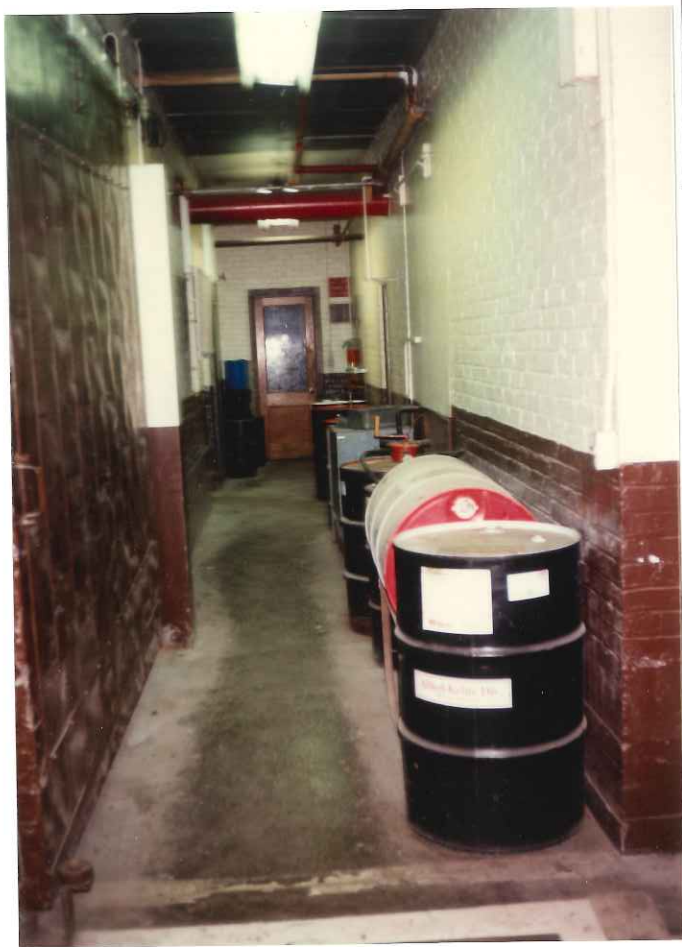


Photo No. : 10
Location : SWMU 5
Orientation : West
Date : February 11, 1992
Description : Waste Oil
and Naphtha Storage Area.



Photo No.: 11 **Location:** SWMU 6
Orientation: Northeast **Date:** February 11, 1992
Description: Waste Solvent Satellite Accumulation Drum adjacent to the first degreaser in the area leased by HFR. Drum with label is being filled and the other drums are empty.



Photo No.: 12 **Location:** SWMU 6
Orientation: Southeast **Date:** February 11, 1992
Description: Area formerly used for Waste Solvent Satellite Accumulation Drum adjacent to second degreaser in Plant 2. Orange drum is empty.



Photo No.: 13 **Location:** SWMU 6
Orientation: Southwest **Date:** February 11, 1992
Description: Area formerly used for Waste Solvent Satellite Accumulation Drum adjacent to third degreaser in the plating room. Drums in photo are empty.



Photo No.: 14 **Location:** SWMU 6
Orientation: East **Date:** February 11, 1992
Description: Area formerly used for Waste Solvent Satellite Accumulation Drum adjacent to original location of fourth degreaser in Plant 1.



Photo No.: 15
Orientation: North
Description: Former location of Waste Solvent Satellite Accumulation Drum adjacent to last location of fourth degreaser in Plant 2.

Location: SWMU 6
Date: February 11, 1992



Photo No.: 16
Orientation: South
Description: Former location of Waste Solvent Satellite Accumulation Drum for waste cleaning solvents in Plant 1.

Location: SWMU 6
Date: February 11, 1992

Photo No. : 17
Location : SWMU 7
Orientation : Southwest
Date : February 11, 1992
Description : Precipitator in
bermed area in Plant 2.



Photo No.: 18
Orientation: West
Description: Roll-off containing chipped floor boards from the plating room.

Location: SWMU 8
Date: February 11, 1992



Photo No.: 19
Orientation: North
Description: Waste Oil Collection Drums with drums of new oil near remaining automatic screw machine in Plant 2.

Location: SWMU 9

Date: February 11, 1992



Photo No.: 20
Orientation: North
Description: Scrap Metal Container near remaining automatic screw machine. A portion of the area leased by HFR is visible in the background.

Location: SWMU 10

Date: February 11, 1992



Photo No.: 21

Orientation: West

Description:

Two 10,000-gallon USTs located under floor in Plant 2. Note access plates in the floor on the right.

Location: AOC 1

Date: February 11, 1992

END OF PHOTOGRAPHS

ATTACHMENT B
VISUAL SITE INSPECTION FIELD NOTES

8:10 am Feb 11, 92

Weather: sunny ~30-35°F

39. Russ Crittenden and Valerie Farrell of Dynaco
John Barry: Mgr. of industrial engineering

Discuss history of facility

Size: ~36 acres (total)

200,000 sq ft. (plant 1)

— 96,000 sq ft (plant 2)

remainder is parking, field,
and undeveloped grassy
areas.

- Began operations in 1930's
expanded to across street
in 1962 - WTS

- Employed approx. 150 people
prior to moving to Sugar Grove.

- Oak has 2 employees working
on computerized screw
machine in plant

2-11-92

2

Operations:

- Manufactured switches and electronic devices

- electro plating - maintenance

- pressing - machining

- assembly - painting

- raw materials used:

- steel

- wire

* Moved to Sugar Grove Jan. 1992

* General nature of operations has remained the same

* - Stopped plating Aug. 1991

* Automatic screw machinings

- lathe operations

- punch presses

- mills

- drills

* Plating - separate baths

- zinc - copper

- cadmium

- silver

- gold

2/11

2-11-92

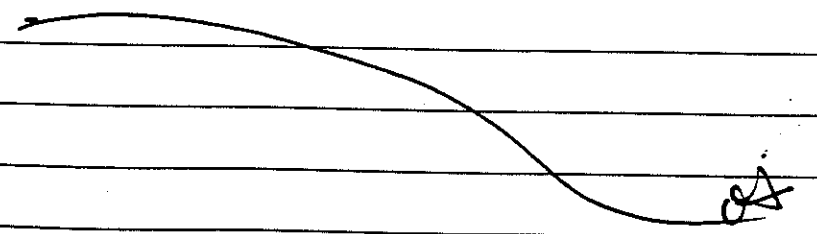
3

- has PCB capacitors at the facility; no known leaks.
- parts washers: ~ 4
 - have been removed
- degreasers remain at facility.

USTs

- not regulated
- filled prior to '73 ^{with} water
- two 10,000 gallon USTs
 - Fuel oil
 - still in bldg.
- have other USTs on property purchased ~~m~~ after 1965

Asbestos:

- some removed during move to Sugar Grove facility.
 - some still on-site.
- 

2-11-92

4

Waste Streams: (from '91 annual rpt.)

① nickel salts: came from
nickel tank.

- only an occasional waste

② waste flammable liquid:

- inks

- F003, D001

- contained PCBs from old
inks.

③ Chromic Acid Solution

- D002

- D007

- from Chromating process

- had a satellite accum.
drum near process

- emptied entire bath
into drum 10-20 gal.

④ Haz waste solid

- F006

- floor sweepings from
plating area

- one time cleaning

JA

2-11-92

5

⑤ Waste Flammable liquid
(F003, D001)

- solvent based.
- containing xylene, isopropyl alcohol
- were collected in area outside storage area.

* Waste Streams from 1990 annual rpt

⑥ Waste paint related materials

- F005
- from maintenance and spray booth
- req. waste analysis

General Solvent Usage

- manufacturing of circuit boards
- cleaning operations
- preparing products for plating ; painting

⑦ Waste TCA

- F002
- still bottoms possibly. ✓

2-11-97

6

- ⑧ Waste corrosive liquid
- 10052)
- to chem-waste
- chromatic Acid.

→ Waste water went to city
monitored?

- ⑨ treatment sludge - Foot
- special waste
- shipped "neutral"
- contained metals
- poison "B"
- drummed in storage area.

Non hazardous waste streams.

- ⑩ Scrap steel, aluminum, brass
- handled by fabrication
mgr.
- unknown quantity

- ⑪ oils:
- machine, hydraulic oils,
etc
- unknown quantity

JS

2-11-92

7

(12) Asbestos - Shipped about 10-cubic yards to BFE in Waukegan in 1988 or 1989

(13) Floor boards - from removal of plating machinery.

- haz

- Chipped up and is in process of removal currently.

(14) Waste adhesive: manifested w/ other flammable materials.

Regulatory History:

- Dynamac files are basically complete until 1988.

Waste Water: - Waste water to city after pre-treatment

- allowed cyanide in to waste water discharge

- reg. to monitor for metals, and cyanide. (copper; chrome, zinc)

(17)

2-11-82

8

940 #1

2
at

Former Location (FL) of From
degreaser S. A. A.
- North

#2 West

Location of 2 10,000-gal UST.

#3 Northeast

- S. A. A. for waste oil used
in computerized screw machine
- will change to water soluble
oil @ of this week.

#4 North

- Small hopper to collect
scrap metal.

- HFR precision machining
Ram Chender - Supervisor

2

2-11-92

9

Degreasers.

#5 Northeast

- degreaser : drums.

#6 South: Small hallway/room

- S.A.A. for used oil & used

solvents - from parts washers throughout

#7 East: of same area described above

#8 South:

- degreaser S.A.A.

- drum used for only this
particular degreaser

#9 West: 3 Drums of Waste.

① TCE - no date.

① TCE - no date

① trash

2-11-92

10

~~HAZ~~

Haz. Waste Storage Area

23 drums total

2 " yellow plastic drums containers
poly-overpack "

- 5" wooden berm

- inventory by Russ Crittenden

- 2 bags of asbestos

#10 - N. east

#11 North

#12 N. West

} panoramic of area.

South

#13

W. Water tank: "precipitator"

- changed approx every 6 mos

- ~2400 gal

- heavy metals were settled
out & reclaimed.

[Signature]

2-11-92

11

#14 trichloroethylene collection S.A.4.
Southwest

#15 southwest
- "empty" paint cans
- containers of products

#16 Cans: containers of products
that are awaiting disposal.

#17 West: roll-offs of wastes to be
removed by chem-waste
- from plating room

#18 Southeast
- Scrap-metal roll-off
- empty drum storage
- west dock

#19 North
- Former location of S.A. 4.
used solvents; metal scrap
~ 1985 first used

✓

former 2-11-92

12

#20

East: location of degreaser
and 15-gallon S.A.A

#21

South: F.L. of chromate bath.

10:55 Wrap Up Meeting

- request for dates of operation
for SWRVs identified

- Storage Area ~1985

- degreaser (plating) ~1970's

- Chromate ~1985

- roll-offs ~1991 - october

- Dock area ~ unknown

- assembly degreaser ~1990

- HFR degreaser ~1987

- Waste Water ~ 1988

precipitator

- S.A.A in plant #1 ~1985

solvent: scrap metal

- waste oil SAA ~1990

near screw machine

- solvent from parts washer: oil ~1980

2-11-92

13

Paint Booth:

- dry booth
- occasional use in production
- ~ 80 hrs. per year.
- used solvent-based paints
- Combined w/ solvents / flammable waste stream

Security:

- Guardian electronic movement detectors current

Area:

- Central High School $\frac{3}{4}$ mile

H F R +

- unknown arrangement
- OAK still owns bldg

★

11:40a John Berry's # 708-658-3282

W. Farrell